The Journal

of the Michigan State Medical Society

Volume 53 | May, 1954 | Number 5

The New Beaumont Memorial

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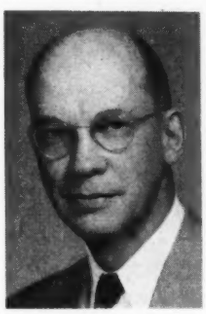
THE JOURNAL
of the Michigan State Medical Society

VOLUME 53 MAY, 1954 NUMBER 5

Contributors to This Issue

M. L. MASON, M.D.



NORMAN F. MILLER, M.D.

MSMS

ANNUAL SESSION

Sheraton-Cadillac Hotel

DETROIT

September 29-30-October 1

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You and Your Business

DOCTOR HYLAND ON AMA INTERN COMMITTEE

WM. A. HYLAND, M.D.

William A. Hyland, M.D., Grand Rapids, Treasurer and Past President of the Michigan State Medical Society, has been appointed a member of an AMA Committee of five to study the intern problem, pursuant to action of the AMA House of Delegates at its June, 1953, meeting in New York.

The new committee held its first meeting at the AMA headquarters in Chicago on April 24, 1954.

Many of the present problems involving internships stem from the discrepancy between the number of internships offered in approved hospitals and the number of available applicants. As a result, hospitals—particularly those of smaller size and without medical school affiliation—have had difficulty in filling their house staff requirements. It is anticipated that the Committee will give consideration to this and relative problems.

The Michigan State Medical Society offers its full co-operation and aid to the Committee appointed to study the intern problem.

SUE NOT (FOR FEES) LEST YE BE SUED

At Least Wait Until the Statute of Limitations Has Run

A doctor who files an action to collect fees for professional services rendered, before the statute of limitations has run, almost invariably is presented with a countersuit, alleging mistreatment and demanding *affirmative damages.*

The statutory period in Michigan on malpractice actions is two years from the last time the doctor saw the patient professionally. On actions to collect open accounts, the period is six years.

The table shows the statutes of limitations on ordinary malpractice actions, actions for wrongful death, and actions to collect open accounts, in several states. In all listed states except Florida and Texas the statutory period is longer on actions to collect fees than on malpractice or death actions. In Illinois the filing of suit to collect fees reopens the case and makes it possible for the defendant to file a countersuit for malpractice demanding affirmative damages after the statutory period on malpractice actions has expired. In all other states listed a countersuit can be filed after the statutory period on malpractice actions has run, only as a defense to the fee action and not for the collection of affirmative damages.

STATUTES OF LIMITATIONS
(numbers indicate years)

State	Ordinary Malpractice	Wrongful Death	Collection of Account	
California	1	1	4	
Florida	3	2	3	
Illinois	2	1	5	
Indiana	2	2	6	
Iowa	2	2	5	
Kansas	2	2	3	After Jan. 1 Following Services
Kentucky	1	1	5	
Massachusetts	2	2	6	
Michigan	2	3	6	
Minnesota	2	2	6	
Missouri	2	1	5	
Nebraska	2	2	4	
New Jersey	2	2	6	
Ohio	1	2	6	
Pennsylvania	2	1	6	
Texas	2	2	2	
West Virginia	1	2	5	
Wisconsin	2	2	6	

HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

Meeting of March 12, 1954

Sixty-two items were presented to the Executive committee of The Council on March 12. Chief in importance were:

- **Polio Vaccine.**—Otto Vandervelde, M.D., Holland, was present and stated that the members of the Ottawa County Medical Society do not want to be included among those being offered vaccine by the National Foundation for Infantile Paralysis through the Michigan Department of Health. Upon request, the State Health Commissioner discussed the matter and the following motion was adopted by the Executive Committee:

  That the Executive Committee of The Council substantiates the stand presented by Michigan's Health Commissioner A. E. Heustis, M.D.: That no opinion be given (a) until a written statement is obtained from the National Foundation for Infantile Paralysis, from Parke, Davis & Co., the manufacturers, and from the Biologics Control Laboratory of the National Institutes of Health of the United States Public Health Service that every lot of the vaccine and the control substance released for use in Michigan is safe for the use intended; (b) until a written

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HIGHLIGHTS OF THE COUNCIL

(Continued from Page 478)

statement is obtained from the National Foundation for Infantile Paralysis that every lot of vaccine released for use in Michigan is antigenic; and (c) until a clear statement from the National Foundation for Infantile Paralysis is obtained as to who, if anyone, accepts the responsibility for any untoward result that might occur upon the use of the vaccine and/or the control substance.

Motion carried.

- **Legal Counsel J. Joseph Herbert** was requested to study the jurisdiction and limits of ethics and meditation committees, both state and local, and report to the Executive Committee of The Council.
- **Beaumont Memorial:** Progress report was presented by Chairman Otto O. Beck, M.D., Birmingham, who stated that $2,000 recently had been contributed by members of the Wayne County Medical Society; $300 by members of of the Oakland County Medical Society; and $400 in contributions had come direct to MSMS. The Beaumont Memorial will be dedicated on Saturday, July 17, 1954, and invitations are being sent to some 7,000 persons to attend this event on Mackinac Island.
- **R. G. Ferris, M.D.,** Birmingham, and **M. H. Pike, M.D.,** Midland, were appointed as members of the Subcommittee on Hearing Defects of the Child Welfare Committee; Ralph A. Johnson, M.D., Detroit, was appointed as a member of the MSMS Postgraduate Medical Education Committee for the unexpired term of E. D. Spalding, M.D., deceased; Nathan J. Frenn, M.D., Bark River, F. M. Doyle, M.D., Kalamazoo, and D. S. Smith, M.D., Pontiac, were appointed to the MSMS Tuberculosis Control Committee.
- R. H. Baker, M.D., Pontiac, President-Elect, was appointed official MSMS representative to attend the Ohio State Medical Association meeting in Columbus April 12-15.
- **Editor Wilfrid Haughey, M.D.,** Battle Creek, stated that the August, 1954, Number of JMSMS has been designated as the "Arthritis and Rheumatism Number."
- **Council Chairman William Bromme, M.D.,** Detroit, reported that the 1954 Michigan Clinical Institute had broken all attendance records with a total of 2,503 registrations, including 1,735 doctors of medicine.
- **The Executive Committee of The Council** accepted an invitation to act as co-sponsor of the Testimonial Dinner for Michigan's Foremost Family Physician, William J. Stapleton, Jr., M.D., Detroit, to be held in the Sheraton-Cadillac Hotel in Detroit on May 11 and sponsored by Wayne University Medical Alumni Association and by the Wayne County Medical Society.
- **A special Committee** to meet with American Legion representatives was appointed: William Bromme, M.D., Chairman, Detroit; R. H. Baker, M.D., Pontiac; L. W. Hull, M.D., Detroit; Ralph A. Johnson, M.D., Detroit; Grover C. Penberthy, M.D., Detroit; Mr. J. Joseph Herbert, Manistique; L. Fernald Foster, M.D., Secretary, Bay City. The committee will meet with the American Legion representatives on March 12.
- **At the invitation of C. D. Selby, M.D.,** of the University of Michigan School of Public Health, the Executive Committee of The Council agreed to be a co-sponsor in a proposed course in gerontology.
- **1955 Michigan Clinical Institute.** The personnel of the Committee on Arrangements was presented and approved by the Executive Committee. The theme of this 1955 MCI will be "What's New For You, Doctor, That You Can Use!"
- **Max L. Lichter, M.D.,** Melvindale, was authorized to attend the AMA Conference on Civil Defense in June.
- **J. Duane Miller, M.D.,** Grand Rapids, reported on activities of the Permanent Conference Committee, including comprehensive survey of nursing needs in Michigan.
- **The monthly progress report** on rheumatic fever centers' activity was presented by Leon DeVel, M.D., Grand Rapids, Rheumatic Fever Coordinator.
- **Committee Reports**—The following reports were given consideration: (a) Child Welfare Committee, meeting of February 24, plus two subcommittee meetings; (b) 1955 Michigan Clinical Institute Committee on Program, meeting of February 25; (c) Mental Hygiene Committee meeting of February 25; (d) Maternal Health Committee, meeting of March 2; (e) Geriatrics Committee, meeting of March 4; (f) Legislative Committee, meeting of March 4, and subcommittee report.

Heart Beats

FRANK VAN SCHOICK, M.D.

Elected Michigan Heart Association President

F. Van Schoick

"The expansion of present activities in the field of cardiovascular diseases and the development of new projects must be continued year after year if the Michigan Heart Association is to maintain its course as one of Michigan's outstanding voluntary health agencies," was the challenging statement made by Frank Van Schoick, M.D., of Jackson, when he was inaugurated President of the Michigan Heart Association on Friday, March 12, 1954.

"The programs established by my illustrious predecessors are positive evidence of the benefits which a *voluntary* health agency can provide to a community," Dr. Van Schoick added.

The Association elected Dr. Van Schoick at its Fifth Annual Heart Day which was held in Detroit in conjunction with the Michigan State Medical Society's Clinical Institute.

Defense Secretary Charles E. Wilson was re-elected Chairman of the Association's Board of Trustees. Mr. Wilson was instrumental in the formation of the Association five years ago.

Other officers elected by the Association at its annual meeting were: President-Elect, L. Paul Ralph, M.D., Grand Rapids; Vice Presidents, Mr. Frank N. Isbey, Detroit, Mrs. Fred Miner, Flint, and Carleton Dean, M.D., Lansing; Secretary, L. Fernald Foster, M.D., Bay City; Treasurer, Charles T. Fisher, Jr., Detroit.

Trustees elected at the annual meeting of members to serve a three-year term were: Mr. Stanley E. Beattie, Detroit; Moses Cooperstock, M.D., Marquette; Mr. Edward Cote, Detroit; Carleton Dean, M.D., Lansing; Leon DeVel, M.D., Grand Rapids; F. D. Dodrill, M.D., Detroit; Douglas Donald, M.D., Detroit; L. Fernald Foster, M.D., Bay City; Mr. Frank X. Martel, Detroit; Mrs. Fred Miner, Flint; Mr. Emmet Richards, Alpena; Donald Smith, M.D., Pontiac; and Myer Teitelbaum, M.D., Detroit. Mark Osterlin, M.D. of Traverse City was elected to fill the unexpired term of Mr. Edward T. Gushee.

Members of the Board of Trustees who were elected to serve on the Association's Executive Committee were: Frank Van Schoick, M.D., Jackson; M. S. Chambers, M.D., Flint; Mr. Frank X. Martel, Detroit; Mr. Edward Cote, Detroit; Mr. George A. Jacoby, Detroit; Mrs. Fred Miner, Flint; Henry L. Smith, M.D., Detroit; Mr. Frank N. Isbey, Detroit; Paul S. Barker, M.D., Ann Arbor; Leon DeVel, M.D., Grand Rapids; Douglas Donald, M.D., Detroit; L. Fernald Foster, M.D., Bay City; Carleton Dean, M.D., Lansing; L. Paul Ralph, M.D., Grand Rapids; W. B. Cooksey, M.D., Detroit; F. Janney Smith, M.D., Detroit; and Franklin D. Johnston, M.D., Ann Arbor.

Dr. Van Schoick made the following committee appointments following his election as President:

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Committee on Cardiovascular Clinics.—Cecil Corley, M.D., *Chairman,* Jackson; John Murphy, M.D., Detroit; L. T. Colvin, M.D., Detroit.

The Michigan Heart Association is an affiliate of the American Heart Association and a member-agency of the United Health and Welfare Fund of Michigan.

National Conference on Rural Health

The theme of the Ninth National Conference held in the Baker Hotel, Dallas, Texas, March 4 to 6, 1954, was "Let's Put More 'U' in the Community." The general chairman was Carl S. Mundy, M.D. of Toledo, Ohio. The conference emphasized the discussion-group type of program to a large extent. Each session included one or two brief papers and these then were the theme of a following discussion period. At these times small groups got together and discussed the various problems which they faced in their own localities in regards to the general theme of that particular session. These groups then reported back to the floor and a general discussion period ensued. It was felt that this was a very valuable method for a conference although in some instances the discussion period lasted quite long periods of time and it was difficult to keep the delegates together in the same thought when each would begin expressing individual opinions on the floor. However, this was not entirely objectionable and the accomplishments of the conference I believe could be said to stem largely from this increased discussion-period idea.

The main topics covered at the conference this year included voluntary health insurance, nutrition, community projects, and a general summary of the aims of the American Medical Association as presented by Dr. Edward J. McCormick, president of the AMA, and Mrs. Leo Shaefer, president of the Woman's Auxiliary.

Nutrition

The discussion on nutrition centered principally upon how to bring the ideas of better nutrition to the general population. It was felt that the most undernourished groups were teen-age girls and housewives, and various ideas were presented on how to emphasize to these groups the importance of proper diet. Another major topic was the question of over-nutrition and the ideas regarding the proper weight-balance factor for each individual were discussed. Also the school hot lunch program came in for its share of discussion. It was surprising the large percentage of schools represented which do have adequate hot lunch programs already in existence. The conclusion of this discussion upon nutrition was that the main factor should be increased educational programs to properly motivate the various groups throughout the country to maintain an adequate nutritional program for their area.

Health Insurance

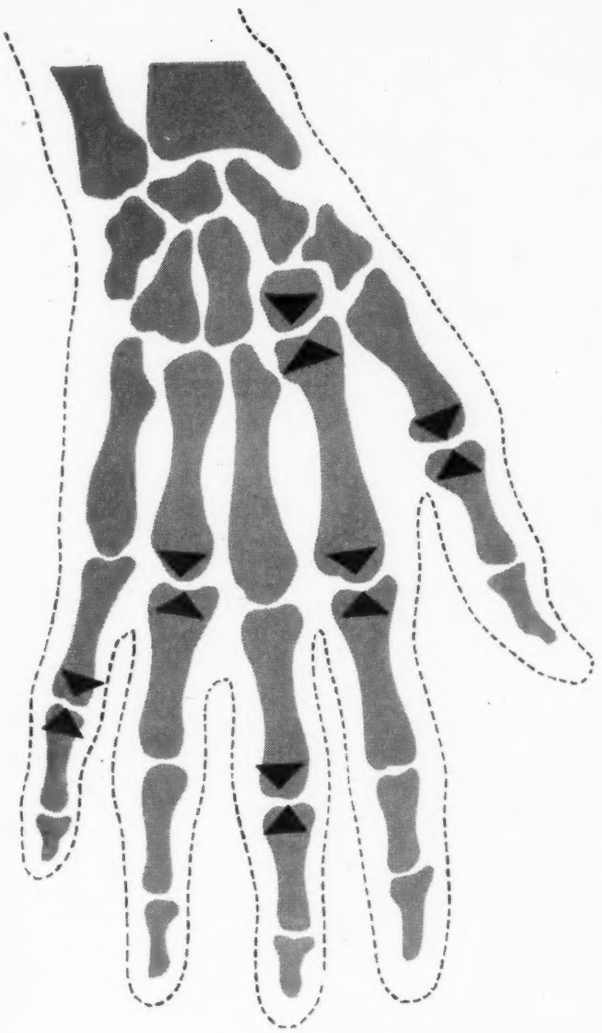
The program on health insurance got off to a bad start, in my opinion. The theme of the discussion was proposed by a rather young and inexperienced man from a commercial company (Provident) and the result was that the discussion never did get around to any of the basic difficulties facing the various voluntary non-profit health insurance programs of the country. However, there was considerable discussion regarding the various problems which do present themselves to the various Blue Cross-Blue Shield programs and it was felt that one of the major faults in our insurance program to date has been the lack of education to the policyholder. It was thought that the emphasis on our public relations regarding overusage, "the golden goose idea," should be directed towards educating the policy owner as to what Blue Cross cannot do. The idea being here that this would help reduce overuse and dissatisfaction with the insurance. This educational program therefore should be carried on at the consumer level equally as well as its direction towards the professional level. A further help along this line might be obtained from an article which was published in *Changing Times* relating to the cost of insurance and these pamphlets may be obtained from the National Blue Cross headquarters for distribution to any interested groups. This might give a lot of information to people who are interested in the various problems of voluntary health insurance.

Community Projects

This was the most interesting part of the program to all concerned. It discussed various areas and their solutions of the various health problems which beset them. There was a discussion of a home-aid hospital, a discussion of a doctor's answer to a community need for better health facilities given by Dr. J. Paul Jones, M.D., of Camden, Alabama, and a discussion on the proper distribution of doctors as given by the Texas Rural Health Committee Chairman, Dr. Chester U. Callen. These comments followed along quite similar ideas that are being followed in Michigan by the program of doctor placement as conducted by the Michigan Health Council. Dr. Jones has constructed his own community clinic and that is along the lines that the Michigan Rural Health Committee has been promoting in regards to helping communities obtain doctors by providing better medical facilities. The home-aid hospital idea simply meant that the community got together and raised enough funds to create proper hospital facilities for that area and did not use Hill-Burton funds.

One of the most thought-provoking ideas came out of this discussion, when Mrs. Esther Thorton, Superintendent of the Washington County Community Hospital at Akron, Colorado, presented a

(Continued from Page 488)



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(Continued from Page 486)

colored movie entitled "Jugs." This is a type of sorority idea on the high school level whereby a local community hospital creates help for themselves and at the same time creates interest in a nursing career among high school girls. The results in Akron, Colorado, have been nothing short of phenomenal in the spirit with which the high school girls take to hospital nursing procedures and the program which they have developed there. Also the amount of interest is shown by the marked increase in the number of girls applying and taking nurses' training from that area. This is well summarized in a very fine 16 mm. color-sound movie, developed by the Colorado Blue Cross and Blue Shield Association. A copy of this film may be obtained for a cost of $195.00 and it seems to this delegate that this movie would be worth its weight in gold for general distribution throughout Michigan communities because, as we all know, all communities are faced with a critical help shortage problem in their various hospitals. Also the decline in the number of nursing school applicants has been rather alarming, and once this film is viewed, I'm sure it gives an idea of where to start in regards to help. Especially the idea of providing more help for the hospitals and increasing the flow of trained nurses coming out of our nursing schools. I would urge the Council to investigate the possibilities of obtaining one or more copies of this film for showing throughout Michigan to schools, clubs, et cetera. It would be an excellent means of public relations and would give communities a definite idea of something to do about their health program.

Perhaps the most stimulating paper presented at the meeting was given by Mrs. Charlotte Benson, health education consultant for the Medical Society of North Carolina from Raleigh. She presented a very interesting discussion of the problems which they have faced in North Carolina regarding bringing better health to the rural areas. She conducted the theme of her discussion from the idea of a Health Council approach to their health problems in North Carolina and gave many interesting examples of how, generally speaking, the solution to each rural health problem is on a local level entirely. She stated, and it was borne out in the discussion that you cannot set up a set of rules that will apply to every community as direct orders. Because many communities simply do not want the ideas that have been promoted by some central agency and simply must work out their own solutions to their problems. This was very well brought out by Mrs. Benson and she was definitely the star of the meeting. If it ever were possible to obtain her services as a speaker or a discussion leader for a conference in Michigan regarding community health problems, it would be a definite advantage to do so. She is one very sharp individual.

Interestingly, too, a great amount of discussion centered on the fact that many of these problems are the direct responsibility of doctors themselves. It was felt by many of the lay people attending this meeting that doctors quite frequently do not fulfill their rightful job of citizenship. In fact, one man said that doctors should be citizens first, and then doctors second. And one could not help but deduce from this meeting that if doctors would interest themselves in their community problems, instead of burying themselves in their office or in their practices or hiding away at a golf game or a fishing session, that many of these problems confronting the communities in regards to proper rural health would be much easier and much more satisfactorily solved with the professional advice that a doctor could give. I felt so strongly about this, that I wish the Council could consider some means of properly publicizing the nature of a doctor's responsibility as a citizen to his community. I think that our public relations have been neglecting this in the past few years.

In summary, I would say that this National Conference on Rural Health was a very well conducted affair and it highlighted many of the problems which each state and local community faces in its desire to obtain better health facilities. I hope that in the months to come, I may be able to further implement my ideas obtained at this conference by the meetings with the Michigan Committee on Rural Medical Service.

I wish to take this opportunity to thank the Council of the Michigan State Medical Society for your confidence in appointing me as delegate to this meeting. It was a thoroughly enjoyable experience, and I wish to thank you very much for this consideration.

BROOKER L. MASTERS, M.D.

Ewing's tumor of bone is a highly radiosensitive lesion.

* * *

In treating any bone tumor, the radiologist should remember that the neoplasm extends longitudinally for a considerable distance beyond the area shown on the roentgenogram.

* * *

Intraoral cancer accounts for approximately 8 per cent of all human malignant disease.

* * *

Adenomas, sarcomas, and occasionally squamous cell carcinomas originate in aberrant salivary tissue.

* * *

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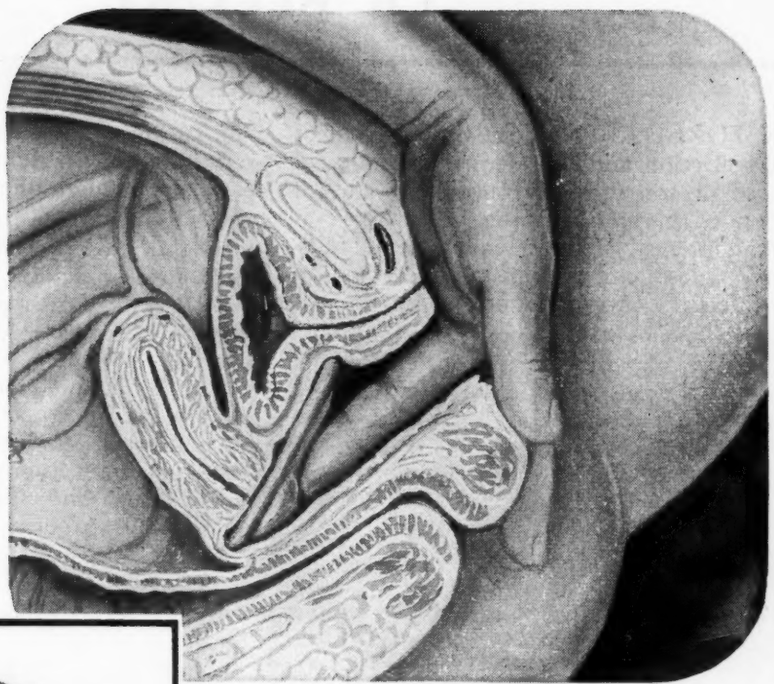
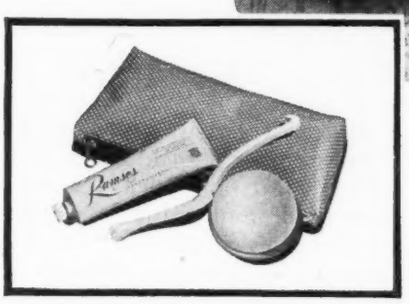
* * *

Malignant lesions involving the tongue and floor of the mouth, as a group, begin as ulcers and early infiltrate the deeper structures of the tongue and/or floor of the mouth.





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PR REPORT

OFTEN FORGOTTEN is the importance of the primary election and the elementary political fact that small, organized groups can control the selection of party candidates when there is little general interest. That is exactly what certain groups, whose interests are inimical to the medical profession, are planning to do.

This year is a non-presidential election year, and broadly speaking there is little interest in the election to date. The Michigan primaries will be held August 3, a month earlier than is the custom, leaving May and June none to early for "get out the vote" preparations and other intensive activities in behalf of good government via effective representation in Lansing and Washington Events in the 1954 Legislature indicate in particular that the individual M.D. should consider it his duty to serve the welfare of the people of Michigan by giving active support to candidates for the Legislature in the August primary who have demonstrated they understand the need for maintaining high standards of medical care, and who are pledged to maintain these standards.

This year, more than ever, the doctor of medicine should study the qualifications and background of the candidates seeking seats in the State Senate and House of Representatives. In several districts, the reapportionment amendment voted in 1952 will have its first effect. Ten new members will be elected to the House and two more will be added to the Senate. Several of the present legislators will not run again. All in all, there will be quite a turnover (probably 40 per cent) in both houses of the Legislature, placing added importance on the careful selection of candidates in the primary election.

ALMOST 800 BILLS and resolutions were introduced in the 1954 session of the Legislature. Of these, MSMS carefully followed the progress of 76 which had aspects of importance in the fields of medicine and health, giving each careful study, and gathering authoritative opinion and advice which was placed at the disposal of legislators. Had it not been for the interest and counsel of MSMS and its members, a number of dangerous or unwarranted measures might have been written into the statutes. Among these, for example, were proposals which would have: Allowed chiropractors to practice in fields far beyond their qualifications; legally established chiropractic as a profession; implied that osteopaths are medical practitioners by entering the phrase "osteopathic medicine" in Michigan law; taken away the protection afforded Michigan by the Basic Science Law; killed the Crippled Children's Act, for all practical purposes, and originated at least two new bureaus or commissions with unusual and unnecessary influence on state activities in health, medical care and rehabilitation.

Reviewing a few measures on the constructive side, the 1954 Legislature, with MSMS urging, took positive action to: Strengthen tuberculosis control; safeguard the eligibility of Michigan residents for Federal welfare benefits by permitting hospital regulation to the extent necessary to comply with Federal requirements but no further; improve administration of the Basic Science Law by clarifying its language and intent; provide more adequate appropriations for mental health, public health and tuberculosis, and allow rehabilitation of drug addicts without branding them as criminals.

NOTE TO COUNTY MEDICAL SOCIETY officers and PR chairmen: Have you selected all your PR projects for the year and put them in action? Many societies are well along in their plans to widen PR activity, setting up new projects for the spring and summer, and aiming for even greater action next fall. Ideas for new and effective projects are outlined in the PR guidebook presented by MSMS and distributed at the last PR Conference in Detroit. Additional copies of this book are available at MSMS headquarters. Counsel and suggestions for implementing the projects are available through the MSMS Public Relations Department in Lansing.

In determining upon new activities, evaluate your present program and discover the fields in which you lack strength. Then select whatever projects will bolster the weak spots. MSMS Field Secretaries are at your service to help you to initiate these programs.

MEDICAL STUDENT ENROLLMENTS

The fifty-third annual report on medical education of the American Medical Association's Council on Medical Education and Hospitals states "enrollments in tne country's seventy-two medical and seven basic science schools during 1952-53 totaled 27,688 (2.3 per cent) more than the 27,076 enrolled during 1951-52. The 6,668 students graduated during the last year exceeds by 279 (4.4 per cent) the previous record established in 1947, when at the termination of the accelerated program several schools graduated more than one class. The estimated number of graduates for 1953-54, based on enrollments reported for senior classes in schools is even greater—6,831." There was, however, a slight decrease in the size of the entering freshman class for the first time in five years—7,425, or sixteen less than the record class of 1952-53.—*New York State Journal of Medicine*, Feb. 1, 1954.

Basic Science Law has "New Look"—and New Outlook

With what is believed to be the last stumbling block removed by the 1954 Legislature, Michigan can now look forward to seeing its Basic Science Law function as it was intended it should function. That is the feeling among Michigan State Medical Society leaders who had a part in carrying out instructions of the 1953 House of Delegates that the law be made more workable.

An Attorney General's opinion, written in response to a request by the former chairman of the Basic Science Board, placed a strict interpretation upon the wording of the 1952 amendment, which was not in accord with the intent of the 1952 Legislature. This resulted in a bottleneck which hindered rather than helped the influx from other "Basic Science" states. The number

AMENDMENT BECOMES LAW

Among those who stood by as Governor G. Mennen Williams (seated) placed his signature on the act giving immediate effect to the amendment clarifying the Basic Science Law were *(standing, left to right):* Carl Hoppert, Ph.D., Michigan State College professor recently appointed to the Basic Science Board; A. DeWitt Brewer, MSMS associate public relations counsel, and J. Earl McIntyre, M.D., secretary of the State Board of Registration in Medicine.

Always considered a good law if properly administered, in the viewpoint of MSMS, the Basic Science Law is a major safeguard in maintaining high standards of practice in medicine and in eliminating the untrained among those who seek to enter the healing arts. When previously amended in 1952, under guidance of MSMS, the law was rewritten in part with the intention of making it easier for applicants who had previously qualified in one of the 19 other "Basic Science" states to get Michigan certificates on waivers.

of applicants approved on waivers by the Basic Science Board dwindled to almost nothing.

With this background, the three licensed groups falling within the provisions of the Basic Science Act met at the Governor's request last November and December to explore what might be done to break the Basic Science bottleneck. From these two meetings came the "official" amendment agreed to by doctors of medicine and representatives of the other two groups.

(Continued on Page 496)

Meats-in-a-Can

and Kitchen-Cooked Meats...
Comparative Nutritive Values

From a practical dietary standpoint, meats-in-a-can—preserved by commercial canning—are nutritionally interchangeable with meats of like variety prepared in the home.[1] For taste appeal, for economy and "keeping" quality, and for household convenience, meats-in-a-can are advantageous in many respects.

As the comparative data here shown indicate, kitchen-prepared meats and similar meats-in-a-can are closely alike in the amounts of various nutrients they provide.

COMPARATIVE COMPOSITION OF KITCHEN-COOKED AND COMMERCIAL-CANNED MEATS
(Nutrient Amounts per 100 Grams)

	*Kitchen-Cooked Ham[2]	**Canned Ham[3] (Chopped, Cured)	Kitchen-Cooked Beef Round[2]	Canned Roast Beef[2]
Water	50%	50%	59%	60%
Protein	21 Gm.	20 Gm.	27 Gm.	25 Gm.
Fat (ether extract)	28 Gm.	20 Gm.	13 Gm.	13 Gm.
Niacin	4.0 mg.	4.3 mg.	5.5 mg.	4.2 mg.
Riboflavin	0.21 mg.	0.19 mg.	0.22 mg.	0.23 mg.
Thiamine	0.46 mg.	0.40 mg.	0.08 mg.	0.02 mg.

*Values after conversion from 42% to 50% water basis.
**Values after conversion from 58.69% to 50% water basis.

Experimental studies have shown that the processing which meats-in-a-can undergo leads to little if any greater vitamin losses than does home-cooking of similar cuts of meat. In general, meats-in-a-can retain of their original vitamin content approximately:

60 to 80 per cent of thiamine
90 to 100 per cent of riboflavin
90 to 100 per cent of niacin
80 per cent of biotin
70 to 80 per cent of pantothenic acid.[4,5]

During storage for customary periods, at usual warehouse temperatures, meats-in-a-can show little, if any, further vitamin loss except in thiamine. Even thiamine, a highly thermolabile vitamin, was 52 per cent retained in pork-in-a-can after ten months' storage at 80° F. Retention of the vitamin was notably greater when the canned pork was stored at 38° F.

Since meats-in-a-can are thoroughly cooked in processing, they may be consumed as purchased, merely warmed or mildly cooked. When the meat is moderately cooked in preparation for consumption, little or no further loss in vitamins need to occur.

Recent studies show that meats-in-a-can are excellent sources of needed amino acids.[6] The 18 amino acids determined in these studies appeared in similar ratio and amounts in canned beef, pork, and lamb as in the respective fresh or home-cooked meats.

1. Howe, P. E.: Foods of Animal Origin, Handbook of Nutrition, American Medical Association, ed. 2, Philadelphia, The Blakiston Company, 1951, p. 637.
2. Watt, B. K., and Merrill, A. L.: Agricultural Handbook No. 8, United States Department of Agriculture, 1950.
3. Schweigert, B. S.; Bennett, B. A.; Marquette, M.; Scheid, H. E., and McBride, B. H.: Food Res. *17*:56 (Jan.) 1952.
4. Rice, E. E., and Robinson, H. E.: Am. J. Pub. Health *34*:587 (June) 1944.
5. Schweigert, B. S.: Am. Meat Inst. Foundation, Circular No. 8, Nov. 1953.
6. Schweigert, B. S.; Bennett, B. A.; McBride, B. H., and Guthneck, B. T.: J. Am. Dietet. A. *28*:23 (Jan.) 1952.

The Seal of Acceptance denotes that the nutritional statements made in this advertisement are acceptable to the Council on Foods and Nutrition of the American Medical Association.

ACCEPTED COUNCIL ON FOODS AND NUTRITION AMERICAN MEDICAL ASSOCIATION

American Meat Institute
Main Office, Chicago... Members Throughout the United States

(Continued from Page 494)

This amendment was introduced early in the 1954 Legislative session as Senate Bill 1082. It quickly cleared the Senate, then went to the House—where it became the subject of considerable discussion—eventually passed, and was given immediate effect when signed by the Governor on March 26. In the House, an abortive attempt to repeal the Basic Science Act by introduction of another bill complicated the outlook for a short time.

Lacking open backing by recognized organizations, the repeal measure died in committee.

A special Basic Science Study Committee, authorized by the House of Delegates, both in the 1952 and 1953 meetings, represented MSMS in discussions on the "official" amendment and made recommendations on MSMS policy to the Executive Committee of The Council. Currently serving on this study committee are H. A. Furlong, M.D., Pontiac, Chairman; D. V. Thorup, M.D., Benton Harbor; and C. E. Umphrey, M.D., Detroit.

With new leadership and every indication of a renewed spirit of enlightened administration of the law, the Basic Science Board has set about to reduce the backlog of applicants which piled up during the months following the 1953 Attorney General's opinion. It appears that time will prove the wisdom of the MSMS House of Delegates in recommending that the Basic Science Law be retained as a safeguard to the welfare of the people of Michigan, yet be framed in the most workable manner. Now, with sound administration, the Basic Science Law can protect Michigan from unqualified practitioners, and still make it easier for many needed doctors of medicine to enter practice in this state.

MEDICAL MEETINGS AND CLINIC DAYS

A list of known medical meetings and clinic days, sponsored by county medical societies and other physicians' groups in Michigan, follows:

1954

June 8	Bon Secours Hospital Annual Clinic Day	Detroit
June 18	Annual Clinic Day, St. Clair County Medical Society	St. Clair Inn, St. Clair
June 18-19	Upper Peninsula Medical Society Annual Meeting	Menominee
June 21-25	AMA Annual Session	San Francisco
July 17	Beaumont Memorial Dedication	Mackinac Island
July 29-30	Annual Coller - Penberthy Medical Surgical Conference	Traverse City
August 12	Fourth Annual Clinic, Central Michigan Committee, ACS Michigan Committee on Trauma, plus Michigan National Guard Medical Personnel, and Medical Society of North Central Counties	Grayling
Sept. 29-30 thru Oct. 1	MSMS ANNUAL SESSION	Detroit
October 14-15	Michigan Cancer Conference	East Lansing
November 3	Clara Elizabeth Fund Lectures Genesee County Medical Society	Flint
Autumn	MSMS Postgraduate Extramural Courses	State-wide

Additions to this list of meetings are invited by the Editor of JMSMS, in order to make this monthly announcement complete and accurate.

UPPER PENINSULA MEDICAL SOCIETY

59th Annual Convention—June 18, 19, 1954
Riverside Country Club, Menominee, Michigan

ADOLPH SANS, M.D., Professor of Neurology, University of Iowa School of Medicine, will speak on "Strokes, Differential Diagnosis."

ALLEN C. BARNES, M.D., Professor of Obstetrics, RICHARD B. CAPPS, M.D., Associate Professor of Medicine, Northwestern University, will speak on "Diagnosis and Treatment of Liver Disease."

MR. HARVEY V. HIGLEY, Administrator of Veterans Affairs, Washington, D. C., will be the Guest of Honor.

These are the names of just a few of the men you will hear.

Visitors at Eli Lilly & Company

Physicians from Branch and Calhoun Counties, who visited Eli Lilly and Company, March 16-18, 1954, are pictured above. While guests of the company, they inspected the Lilly Research Laboratories and toured pharmaceutical, biological, and antibiotic production facilities.

Among those included in the group were Dr. Hugh Robbins (third row, third from left), medical director of Calhoun County, and his wife (fourth from left); Dr. Henry Gomley (third row, fourth from right), president of the Branch County Medical Society, and his wife (third from right); Dr. Salvadore Yanatelli (third row, second from left), director of the Arthur S. Kimball Sanitarium in Battle Creek, and his wife (second row, second from left); Dr. Ernest Jones (last row, extreme right), manager of the Veterans Administration Hospital in Battle Creek, and his wife (second from right); and Dr. Ed Rennell (fifth row, fourth from right), director of the State Training School of Coldwater, and his wife (third from right).

At the extreme right of the first row is W. A. Lindwall, Lilly representative in Battle Creek, who accompanied the group to Indianapolis.

MEDICAL TELEVISION SHOWS OVER WJBK-TV

Sponsored by the Michigan Health Council

Date	*Subject*	*Guests*
February 14, 1954	Rheumatic Fever	Manes Hecht, M.D., and Norman E. Clarke, M.D., Detroit
February 21, 1954	Development of Cortisone	E. L. Burbidge, M.D., and H. F. Hailman, M.D., Kalamazoo
February 28, 1954	Dental Health	Arthur V. Diedrick, D.D.S., of Detroit; Charles W. Harling, D.D.S., of Grosse Pointe, and Fred Wertheimer, D.D.S., of Lansing
March 7, 1954	Rehabilitation	George H. Koepke, M.D., and Mrs. Marian French, Ann Arbor
March 14, 1954	Your Doctor's Clinical Institute	L. W. Hull, M.D.; Ralph A. Johnson, M.D., and Eugene A. Osius, M.D., Detroit
March 21, 1954	The Industrial Nurse	Allene Haines, R.N., Vicksburg; Alverta Wenger, R.N., Plymouth; Evelyn M. Johnson, R.N., Detroit
March 28, 1954	New Hope for Hearts	Henry L. Smith, M.D., Detroit
April 4, 1954	Home Nursing Care	Gerald Wilson, M.D., Mrs. Alexander Paradzinski, R.N., and Mrs. Ann Cole, R.N., Detroit

The JOURNAL

of the Michigan State Medical Society

Issued Monthly Under the Direction of The Council

VOLUME 53 MAY, 1954 NUMBER 5

Preventive Geriatrics

The Plan

THIS PRESENTATION represents a new type of project. It is best described as a panel discussion carried on by mail. The panel was made up of the discussants quoted and the members of the Geriatrics Committee. The paragraphs uninitialed represent the will of the committee. The initialed paragraphs represent the thought of a member of the committee. All other material is accredited to its author.

The Committee

The committee making this report was appointed by the Michigan State Medical Society to study the geriatric problems of the State of Michigan. Since geriatrics is defined as that branch of the medical sciences which has to do with the diseases of the aged individual it seemed at first glance that the work of the committee was rather well defined.

The Work of the Committee

A closer study revealed, however, that the so-called degenerative diseases usually associated with the aging man were in our modern times being found in greater numbers in the more youthful individuals. Many of the diseases associated with childhood or the young adult period were occurring in the later years. It was also quite evident before many meetings of the committee that the aging group itself was very poorly defined inasmuch as many members who were definitely past the accepted limit of sixty-five years actually had many of the physical, mental, and emotional attributes of the people of the forty age group, and many of those in the forty age group had some of the so-called stigmata of the aged. Thus, we had not gone very far in our study when we realized that the association of certain specific diseases with chronologic years was not as hard and fast as we originally believed. Also, that the concept of an aged individual does not necessarily depend upon his chronologic years and that as yet we do not have a very good set of criteria as to what constitutes physiologic aging. In fact, perusal of the literature to date gives us a very indecisive criteria as to what are the effects of the passage of time on the organism and what are the effects of pathologic aging.

The work of the committee which started out in such a well-defined limited area turns out to be vertically and horizontally limitless. Every facet of the relation of an individual to his environment both internal and external, and particularly those associated with the passage of time come into the province of the committee's work and interest.

The succeeding paragraphs will outline the size and some of the ramifications of the problems touched on by the committee and how the concept of preventive geriatrics arose.

Time Perception—Past

The strategy of some industries which started some years ago of retiring workers as worthless after they had reached the age of sixty-five has left a definite imprint on the scientific and lay thinking regarding gerontologic problems. This erroneous concept isolates a large part of our population who, although they do not represent a homogenous group except for the one criterion of age do present many problems in common and for the moment will be considered together to illustrate the size of the problem. One hundred years ago 2.6 per cent of our population was sixty-five years of age or over and this group represented about 602,000 individuals. Now approximately 7.7 per cent of our population are sixty-five years of age or over and represent a total of about 12,300,000 individuals. In 1980, this group will represent in excess of 15 per cent of our total population, and the number of individuals will be near 25,000,000.

At this point, it must be quite obvious to the

Prepared under the supervision of the Geriatrics Committee of the Michigan State Medical Society. For personnel, see Page 535.

students of the problem that if life were to continue on after sixty-five with the same emphasis on time perception regarding the future as is the case of the group just passing thirty, this mere shift in the quality of our population would pose very few serious problems. (FCS)

Time Perception—Present

To be a member of the aged group at the present time is to be included among the disabled and the chronically ill. Labor and industry have made a great segment of this number worthless from a physical, mental, and emotional standpoint. This same group as well as many others have been inadequately provided for economically. The size of the total group is probably contributed to largely by inclusion of a great number who might well be termed refugees from the infectious diseases of earlier life and are now candidates for the chronic diseases. To cope with chronic disease calls for a greater financial outlay than does the attack on acute—usually short-lived—infective type of disease. This cannot be taken to mean that the battle against acute and largely epidemic disease was easy but only that it was of a different type. In the early days a courageous individual could by stealing the handle to the town pump or by vaccinating a host of people stop an epidemic in its tracks without much continued effort on the part of the population. In our conflict with chronic disease we are in a different type of struggle. This is a hand to hand grapple on an individual basis which began with birth and continues throughout life. The people must be educated and learn to live by all the new concepts of preventive medicine not for a day but always—no simple "shot" in the arm will confer immunity from the degenerative diseases of man. The rebirth of rehabilitation for both the younger and the older age groups also means an increase in economic and time load for the producer. To provide medical, social, financial, occupational, recreational, and rehabilitative measures for this ever increasing group is to add such an economic load to the one yet in the productive field that our present standard of living must definitely be affected unless we can offer a positive program that will change the above indicated trends. In England, at the beginning of the century, fourteen workers were available for the support of each oldster. By 1950, the burden of old age had been doubled and one oldster had to be supported by seven workers. (FCS)

Our present methods of retirement are both sinful and wasteful. After many years of training and experience, human beings are thrown on the scrap heap with some of the finest human attributes having been brightened rather than dulled by time. Only time can purchase such a high degree of consistent loyalty and "know how." Retirement in its purest form should exist in the following two phases only: Voluntary retirement which depends entirely upon the wishes of the retiree and the compulsory type which would separate a man from his job because of physical, occupational, emotional, or mental reasons. The remuneration of the former would depend on the time in service and the remuneration of the latter would depend on the character of the disability, as well as the time in service. (FCS)

Even realigning of the retirement regulations does not do away with the necessity for a certain type of education for retirement. It is pretty well agreed that the only healthy concept for the worker is to retire to something and not to retire from something. Disease and boredom soon take their toll of the retired who are unhappy and unoccupied.

The committee devoted much time in the study and discussion of the adequate care of the older individual who is without responsible relatives to provide a home for him, adequate building programs that include some types of provisions for the aging individual, more and better suited convalescent hospitals where those who are marginal patients both from the standpoint of illness and economics can be cared for at the least cost to the patient and the community, and above all a great educational program directed toward the doctor, the aged and the young who will someday be old. This program should call to the attention of every living soul the place of the aged and the aging in our world, their contributions, the necessity for their being considered individuals, the right for them to take their place in the production line as long as it is physically and mentally possible, the obligation of our civilization to provide for the aged as well as every other individual the opportunity of working. (FCS)

Rehabilitation problems in this aged group have also become the subject of this committee's efforts. These are environmental, psychiatric, and mental as well as physical. The experience of many in this field has shown that the efforts are physically, mentally and emotionally worthwhile and economically expedient.

Because of the fact that convalescent homes hold a possible answer to some of these problems, they, too, have come under the scrutiny of the committee. What kind of problems can best be handled in a convalescent home, what type of convalescent homes are available, what should be the training of directors of these homes, what kind of standards should be set up at the state level so as to provide good types of treatment for the patients, were some of the problems discussed at various meetings.

The problem of two generations living in one home comes under the study of this committee. Something must be done to make these situations more compatible. Certainly there is no way to separate the generations in the foreseeable future. An educational program directed toward both generations should be productive of some results.

The material which must go into such educational efforts should be spelled out in the near future.

Time Perception—Future

The study of this political and economically important group which are now past sixty-five and which are now subject to our present laws of retirement and who have made very little preparation for such retirement constitute at present the bulk of the gerontologic problem. Included here are those who passively sit on the front porch and watch the children go to school or sit by the fireside and knit trying to make ends meet on their retirement pay or social security income, or those who pass much of their time at recreational centers provided for the aged by labor unions or church groups or those whose major interest centers in the bingo hall, or those who have sufficient funds to spend a great deal of their later years in travel or those few dynamically interested citizens who are contributing their talents to school boards, hospital drives, etc., or those who motivate their passing days by being interested in work shops of one type or another and those who shout enthusiastically for the Townsend Plan. This potential giant, like an infant purposelessly flexing his muscles in every direction, may someday with the help of an inspired leader show such coordination of purpose and effort as to mold our present method of government and finance to his will. For this and many other reasons solutions must be forthcoming. (FCS)

Education of the Physician

One of the major facets in the program of any geriatric committee must be the education of the physician himself. Every member of this committee at one meeting reported at least several instances where sick calls were refused by physicians stating that they did not take care of people of the advanced age group. Probably even more harmful to the satisfactory care of this group is the attitude of some physicians who take care of the older individual but do it with remarks, "What can you expect at this age in life?" or, "We can't make a new machine with old parts." The potentialities and possibilities of an oldster recovering from any given insult is equally as unpredictable and miraculous as in any age group in life. The sooner the physician realizes this and approaches the problem with some hopefulness in his attitude, the better will be our results. (FCS)

Cultivation and Conservation of Personal Assets

It became very apparent in meeting after meeting that the group we were supposed to be studying was quite an ill-defined one because we did not know any good active criteria for physiologic aging. Moreover, chronologic aging was a very artificial method for establishing groups. Because of the experience of some large centers in rehabilitating the older individual both from the standpoint of mental, emotional, and physical defects, and also because of the comparison of numbers of individuals in the same chronological group from the standpoint of the variability of their usefulness, it was evident that many of the better attributes could probably be cultivated through some educational effort directed toward the young individuals. These have to do with keeping up a certain amount of physical exercise and mental gymnastics so that the physical and mental horizons do not close in on one as he grows older. This type of educational program certainly ought to add more living to longevity. (FCS)

The battle ground of the men against death is about to be transferred from the field of acute infectious diseases to the more chronic diseases of man. In this approach we need to know more about heredity, problems of growth, problems of physical, mental and emotional development, adjustment to environment, and primary and secondary prevention of disease entities. Not very much really unbiased and unprejudiced knowledge of the above factors exists. If this were available it would help us in our geriatric investigation. Some of the things we think we know constitute a major hazard in designing research and investigative work. What is and what is not due to the aging process is still a matter of a great deal of controversy. (FCS)

The Preventive Geriatric Concept

How we can prevent the development of many of these problems became the theme of practically every meeting of this geriatric committee. It was decided to test the validity of preventive geriatrics as a concept. Were there any unbiased, unprejudiced, scientific data in the literature which might fundamentally support the idea? To find out if the opinion of some current authorities might lend weight to the concept of preventive geriatrics, the following letter was sent out to a number of students in the field.

The Subject for Panel Discussion

"For some time the Geriatric Committee of the Michigan State Medical Society has been studying the problem of aging. From the medical standpoint for the purposes of this letter the problem seems to resolve itself into two phases. First the apparent deterioration in the biologic processes of all living matter—senescence; and second, the disease processes superimposed upon senescence.

"A large part of the geriatric literature up to the present time has concerned itself with making observations on the progress of senescence and the superimposed diseases. Most seem to feel the phenomena observed are as certain as death itself.

"But since there is such a marked variation in the rate of senescence in certain individuals, since our older

group now represents more physical and intellectual vigor than a similar group of fifty years ago, since there is at least some evidence of rejuvenation of a few of the more hardy souls who find new mates or interest in their later years, and since superimposed diseases might well be prevented or modified by application of certain principles of preventive medicine, the question naturally arises: What would be the possibility of formulating a body of logical postulates from all the disciplines involved that would retard deterioration now associated with senescence and prevent or postpone the diseases generally associated with the aging group?"

The preventive geriatric approach has been mentioned only infrequently before this time. It assumed a larger proportion of importance in each subsequent meeting and we therefore decided to try to more or less summarize some of the ideas of others, adding to these the concepts of sixty-nine panel contributors as well as the opinion of the members of the Committee. What is about to be said has probably all been said often and better at some other time.

"Out of the old fieldes cometh al this new corne fro yere to yere."—Bartlett's Familiar Quotations, Preface to the Ninth Edition.

Senescence

Senescence is used usually to indicate the so-called normal changes associated with aging. These normal changes are often a puzzle. Frequently these changes actually represent chronic disease which is asymptomatic and because it is asymptomatic is termed the effects of aging. There is sometimes quite a difference between being classed as having chronic disease and being actually ill. How many of these changes associated with senescence are actually due to other factors is still a problem to be decided. The most popular concepts of aging, its characteristics, and its length are found in the following two quotations. "The days of our years are three score years and ten; and if by reason of strength they be four score years, yet is there strength, labor, and sorrow; for it is soon cut off, and we fly away." Tenth Verse of the Ninetieth Psalm. And from Shakespear's "As You Like It," Act II—

"All the world's a stage,
And all the men and women merely players.
They have their exits and their entrances;
And one man in his time plays many parts,
His acts being seven ages.
At first the infant,
Mewling and puking in the nurse's arms.
And then the whining schoolboy, with his sachel
And shining morning face, creeping like a snail
Unwilling to school. And then the lover,
Sighing like furnace, with a woeful ballad
Made to his mistress' eyebrow. Then a soldier,
Full of strange oaths, and bearded like the pard;
Jealous in honor, sudden and quick in quarrel,
Seeking the bubble reputation
Even in the cannon's mouth. And then the justice,
In fair round belly with good capon lined,
With eyes severe and beard of normal cut,
Full of wise saws and modern instances;
And so he plays his part. The sixth age shifts
Into the lean and slippered pantaloon,
With spectacles on nose and pouch on side;
His youthful hose, well saved, a world too wide
For his shrunk shank; and his big manly voice,
Turning again toward childish treble, pipes,
And whistles in his sound. Last scene of all,
That ends this strange eventful history,
Is second childishness, and mere oblivion,
Sans teeth, sans eyes, sans taste, sans everything."

Time

Aging in the realm of man is the effect or change on the individual wrought by time. Each stroke of man's own invention, the clock, must be associated with some meaningful change in the organism. To prove this seems to be a most difficult if not impossible problem. Even in the laboratory animal this problem is far from simple. It is true that most every factor in an animal's life can be fairly well regulated and stabilized. Changes that thus occur in time can be said to be associated with that passage of time. Much of these measured changes however, may be due to the fact that the animal is incarcerated in the cage, or that there may be personality differences between him and the cage tender. In any case, removing all the psychosomatic, physical, psychic, bacterial, and viral causes for change we come up with the sum total effects caused by aging. If time produces no effects then removal of the above causes should produce a situation wherein immortality results. It is very well agreed as proven by Carrel's growing bit of chick embryo that if all environmental factors of change are controlled the one-celled animal is immortal. This does not mean that the one cell continues to live on unchanged through aeons of time but that its likeness is perpetuated in subsequent daughter cells without leaving behind a corpse. This mortality in the more complex individual is affected either by the very complexity of the individual or by time itself. (FCS)

Aging

In the complex organism aging is associated with a balance between the kinetic forces of construction and destruction so that the function for which the individual is designed may be accomplished. This constitutes an accentuation of constructive forces until certain material objects have been accomplished and then a gradual shift of emphasis to the destructive side with probably more emphasis on the non-material aspect of man's nature. (FCS) Stieglitz refers to this process as evolution and involution. He further says, "Aging begins with conception and terminates with death. . . . Aging involves two simul-

taneous processes which operate continuously in spite of the fact that they are contradictory to one another. On the one hand growth or evolution occurs, on the other atrophy (which means shrinkage) or involution. These processes, continue throughout life, though at varying rates. We can observe illustrations of atrophy even before the infant is born in the disappearance of the gill clefts which first develop and then atrophy in the early mammalian embryo. At the time of birth when the child begins to breathe and get its oxygen from the lungs instead of from the mother's circulation the atrophy of certain arterial structures is indistinguishable under the microscope from the involutionary changes which we see late in life. The atrophic process is the same in the newborn infant and in the senile grandparent. A very interesting phenomenon occurs in the placenta or afterbirth. It becomes atrophic or 'old' when its functional life is near termination. At nine months of pregnancy, there exists an intimate proximity and interdependence in a very young baby, a middle aged mother, and a senile placenta. Biologically adjacent and functioning together are three widely divergent biologic ages. Here is an area of study which has by no means been explored adequately."

In one sense only can aging be retarded or accelerated. This probably only for a short period of time as when the total metabolism is slowed or hastened by cold or heat. This type of change could probably only be purchased at the cost of trauma to the individual and would add no noticeable increment to longevity. (FCS)

Immortality

The one-celled animal in a proper culture media may be said to possess immortality in that the involutionary process of aging is not evident, so long as all environmental factors are controlled, but in the light of our concept above they must definitely age. That is change in some way between the time of one division and the next. Although the proof may be impossible to attain at the moment there must be some difference between the daughter cell of one second of age and the one of ten minutes of age just before the next division. This must be true since in a controlled environment division occurs as a function of time and a single cell of a certain species will have daughter cells only after the passage of so much time. The measure of this change in a unit of time is probably the purest estimation of the effect of time on protoplasm. (FCS)

This type of immortality is almost entirely outside the realm of control or direction by the organism. Protection for the individual cell from its environment including its own waste products and continuity of the race rests on the weak reed of environmental stability. Realizing these defects evolution proceeds in the direction of exercising more and more control over these environmental factors. The age of specialization was begun. Groups of cells were set aside to take care of irritability, growth, reproduction, respiration, temperature, et cetera, so as to regulate the complex individual's (or better the community of cells') environment. Thus potential but hazardous immortality of the individual cell was sacrificed for what seemed to be less immortality potential but a more certain definite life span. The proof that this was a wise choice lies in the fact that the most complex of all creatures has managed to become the dominant force in the universe, while the unstable, uncontrolled environment has kept the one-celled animals at their previous level. (FCS)

Logically it now follows that some definite change occurs in all organisms in time. This can hardly be retarded or accelerated when only time and protoplasm are the variables. By changing other variables such as the chemistry or temperature of the environment the rate of change produced by time can be altered but probably not to the advantage of the individual so far as longevity is concerned. (FCS)

Disease

Disease has been described as that state of being out of harmony with one's environment. Bacteria, viruses, and malignant growths may disturb the internal environment enough to cause disintegration of the individual. The internal environment, body chemistry, temperature, pulse, et cetera, operate within rather narrow limits and are only mildly influenced by age. Exposure to environmental stress, physical agents, et cetera, may operate through wider limits but produce their deleterious effects ending in diease just as surely and certainly as do the bacteria. It would seem then that the resulting picture of a disease process would be little affected by age as such except as this particular disease might be influenced by the preponderance of evolutionary or involutionary processes at work at the moment. Without evaluating all these factors it becomes hazardous to assume without re-examination, research, and study that old people tolerate certain changes and effects poorly. By now it will be evident that it is suggested that the effects wrought by time and time alone are the same from the start of life to its end and vary only as the protoplasmic substrate varies either as the results of the effects of previous time or stress. That most of the changes associated with so-called normal senescence are the results of the impact of environmental phenomena both internal and external to which the individual has made a partially satisfactory adjustment. A totally unsatisfactory adjustment results in death. To improve longevity then, one is not left with as few tools as seemed to be the case at first glance. We are beginning to understand some of the psychosomatic effects of stress on the individual's health and happiness. The

application of this understanding early in the life of the individual may well bring about better adjustment, better health, and a longer life. What to do to retard the deterioration associated with senescence produced a great deal of agreement between the "Mail Panel" members and the members of the Committee. (FCS)

Psychosomatics

J. Sheldon Turner of the Department of Health, Education ,and Welfare states:

"From experience in the public welfare field, it appears that the key to retardation of senescence and prevention or postponement of diseases associated with the aged lies in further exploration of the relationship between emotions and physical disorders, i.e., the relationship between physical and mental health.

"Already the field of medicine has identified tension as a causative or contributing factor to certain physical ailments and the field of psychiatry has established that physical complaints of various sorts may occur when some individuals are placed in a social situation with which they do not have the capacity to deal. In a sense these are conclusions about extremes. We still have very little knowledge about the relationship of feelings and physical well-being for people in general or about what actually goes on within the human body when worry, unhappiness, and more extreme forms of emotional deprivation occur.

"From our experience with large numbers of people with varying problems, we can reach at least a tentative conclusion that personal well-being is dependent upon some sort of equilibrium between the organic and emotional life of the individual. We can observe that many people of all ages when deprived of love or other social satisfactions develop a variety of physical disorders. We can observe also that worry about one's personal situation often seems to retard recovery from illness. It appears that as interests in the outside world are shut off for any reason and the attention of the individual is focused increasingly within himself, he seems to suffer loss in competence both as a person and at his job.

"While such observations give a welfare worker some insight into ways he can help the individual, we still have no clue to what it really is within the individual which establishes the significant relationship between feelings and physical functions. Until we have greater knowledge of this relationship and therefore the ability to use it more consciously in the behalf of people, attempts at both preventive and curative measures in this field of human life will be limited.

"It is an area of concern which affects people of all ages and it seems safe to assume that preventive measures in early life will reduce many of the problems which are now thought to be characteristic of the aging process. The person brings to old age the satisfaction and disappointments which he has collected along the years. Perhaps the only uniqueness of old age is the attitude of our culture about aging, the gradual loss through death of close friends and relatives, and the wearing out process of the body, which at least at this stage of our knowledge, appears to be an accompaniment of advancing years."

One wonders how much of a geriatric problem there would be if the attitude of the family, relatives, the community, and industry and government could be the same on the sixty-fifth birthday as it is on the thirty-fifth birthday.

The Authority

In a similar vein, Howard Wheeler says:

"However, I feel free to say that both observations of and experience with life in the later years (I am in my seventy-third) have just about persuaded me that the ups and downs in the curve of health would be found to parallel closely those in the curve of morale, if the latter could be graphed.

"In other words, I have come to think that in the search for the key of our 'aging problem' the terrain of exploration in medical therapeutics and prophylaxis might be extended with profit to include the area of attitudes: attitudes of older people as regards both the community and themselves, as well as attitudes of the community as regards its older members. For, if and when the American genius for invention comes up with a way by which our society will be brought to think of its senescent segment as integral with and important to the welfare of the whole, then, I think, many of the gerontological problems which we are now identifying, analyzing and endeavoring to crack will dissolve of themselves. This may be a long and almost imperceptible evolutionary process. It could be, though, in the nature of an awakening. In any event, as an experienced senescent, I can see much to be gained and nothing to lose if medical science elects to turn a speculative eye in this direction.

"The present and pressing need, as I see it, is for recognition of, encouragement and development of, and, above all, use of the contributive potentials of the older members of the national family, with monetary return truly representative of the nature and value of contribution, calendar age notwithstanding. If American ingenuity could bring this about, one would not be far out on a limb, I think, in predicting that 'the declining years' would become largely a myth of the past, with maintenance of good health seen to be closely connected with maintenance of high morale. However, this may be, surely it is clear enough already that segregation of and unjust discrimination against our older people as they try to carry on in a standard of living to which they have become accustomed will not work towards the solution of the problem of our aging population.

"You of the medical profession, I am sure, will give the nod to this one lay observation: A health impairment in senescence, or, for the matter of that, in any other period of life, may have a cause not readily discernible in the effect. I could present clear evidence out of my own rcent experience, for example, that destructive emotional state can be the cause of illness.

"In the field of psychosomatics I am, to be sure, close to being a complete know-nothing. But even so I take this opportunity to suggest that the family physician, and the specialist and medical consultant as well, are in a uniquely favorable position to impart that which makes for improved morale and so far improvement in physical tone. This I further suggest is particularly true of medical service to lonely and discouraged older people."

Needs and Motivation

Irene Beland feels:

"In the prevention of disease and postponement of senescence one of my observations has been that by and large the elderly person who is needed and feels that he is needed in the family situation or group and who continues to carry responsibilities commensurate with his abilities and condition seems to have a happier and healthier senescence than those who do not have responsibility for themselves and for others."

Along the same line Nila Covalt says:

"My work has not been directed at the postponement of senescence, but rather at the physical rehabilitation of individuals regardless of age . . .

"1. Motivation and the desire to remain alert appears to be one of the prerequisites for the delay of senescence.

"2. If a patient has a chronic illness or disability superimposed upon his aging processes the individual's own fears in regard to the illness, or the fears of his family, and the secondary gains to be obtained from dependency, are basic opponents to motivation.

"3. We might further postulate:
(a) Frustration abets senescence.
(b) Rejection by society (one's peers) leads to senescence.

"4. It is my opinion also, and this is not substantiated to my knowledge, that the social climate in which older people may find themselves hastens the process of senescence. Such things as inadequate income, substandard housing, lack of recreational facilities, and the inability for a variety of reasons to be a contributing member of society are concomitant factors of the process known as senescence

"It has been our experience in teaching Activities of Daily Living in our physical medicine and rehabilitation department, that motivation and willingness to be physically rehabilitated are not related specifically to the age of the individual. Rough estimates have shown us that a patient with either mild or severe physical disability may as often accept full training and carry out all the prescribed treatment in physical medicine and rehabilitation when they are sixty-five and older than the patient in the age group from twenty to forty."

Ruth Hubbard believes:

"A graduated reduction of load is probably indicated for most people, certainly on the physical side. But the period at which this should begin is highly variable as you have indicated. I believe just as strongly that the continuing of some responsibilities and the maintenance of active interest contribute largely to the postponement of senescence."

Still largely in the field of psychosomatics, Ollie Randall says:

"There are three or four phases of living which to me are basic to anything which might be called 'preventive geriatrics.' They are not necessarily medical phases of living, but I am sure that we have long since come to an understanding that physical, emotional and social well-being are well nigh indivisible and indistinguishable.

"To me the best measure for helping to grow to adulthood and old age in a physically and mentally healthy manner is to have within the family unit the resources which are conducive to the support of the individual's personal security and development as a human being and a citizen. We assume far too often that the mere existence of the family, which is our single most important social unit, is sufficient to guarantee the total support that each individual member needs. We are of course witnessing a social revolution of such proportions that many of the families today which should have the responsibility for maintaining relationships which strengthen the individual and which assume that responsibility, are not capable of carrying it. But only through a strengthening of the family through better social and economic opportunities, through family life, education, including health education, can we hope to have what you are pleased to call 'preventive geriatrics.'

"In the broadly extended acceptance of pediatrics we are of course finding a beginning of the kind of health measures which we must have. Our failure to stress the need to carry out the intensive health care of infancy and early childhood for ourselves and for others, as we grow into adudthood and middle age, is the primary failure either in an individual or a community approach to preparation for a vigorous old age.

"Along with this it is my further conviction that life should be more favorably balanced throughout its span in relation to work and play. It is difficult to learn to play and relax after a life which has been devoted primarily to work. Fortunately, our industrial revolution is making time for play available to almost everyone, but as yet we are novices in learning to use that time profitably. The great amounts of money spent in the United States for spectator sports and passive enterainment indicate the lack of earlier training and appreciation of activities which through participation by the individual then become creative as well as recreational for him. A continuum of experience in balanced living is in itself the best preparation for later adulthood and old age, which should then come along naturally without the sharp break and personal suffering now common to so many people. Barring this unself-conscious preparation, certainly by middle age one should begin to realize one's major social needs as a human being and consciously prepare for meeting them.

"Nor can it be forgotten that there is a direct relationship between financial sufficiency and satisfaction in the less material aspects of life. Therefore it is probably useless to think of 'preventive geriatrics' without some attention being given to building economic resources which will provide for adequate living, including adequate and proper nutrition. Poor nutritional habits, as I have watched many older people I have come to know, seem to account for many of the health and personality problems which crop up in later life. Attention to these on a knowledgable basis is as essential in the middle and later years as it is in the earlier years.

"With companionship and sociability so vital to every human being, it seems important for people to be aware of this and to exercise some initiative in keeping ties with other people strong enough to prevent loneliness from becoming the destructive factor it so frequently is. Such loneliness, often mistaken for rejection, is one of the main reasons for so much of the illness and unhappiness of old people I have known.

"A diversity of cultural pursuits and interests seem to me be a 'must.' One can count so little upon retaining all one's faculties throughout life that one's inner and outer resources should be culturally satisfying and various enough to permit adaptation to the failure or the loss of one or more of these during old age."

The problem of providing economic security for life through the medium of the Saturday night pay check raises many issues so picturesquely stated by Dorothy Anne Miller:

"You can't work in industry very long without getting drawn into the big question of what's to be done about older persons. Letters stream over your desk from retired workingmen. And from worried or angry wives of men about to be retired. And from people who'll be retired in a few years and don't cotton to the idea. Some folks drop in to chat. Or waylay you in the plant. Or on the street. You get flooded with questions. And besides those they ask, you learn to read behind their talk other questions they don't mention.

"If publiciy is your job, you get to a point where you have to think about tackling the matter of aging which is so important to all these folks and your company, too. You set out to look for answers to their questions. But who's got answers? You put a few questions on your own hook to people you think might have them.

But what do you get? Platitudes, easy opinions, generalities. You look for books. But there are mountains of controversial reading to do before you're equipped to start batting out really punchy paragraphs. And in the meantime, there's F. K., bitter and forcibly retired at seventy-nine, his heart fettered to . . . and his engineering wizardry still making him better than a dozen of the younger fry. There's big J. D. in the engine plant, a modern-day Samson, whose great trouble is the wrong birthday coming up this year. And there's J. G., once a professional ball player, who says: 'Man, I am just what the Tigers need and they tell me I can't even be a sweeper any longer.'

"You take a picture of a group of retiring longservicemen and you don't need to ask for stories of their lives because everything that's important shows right in the photograph. Strong healthy men and shrunken timid ones, happy whistlers and whiny hypochondriacs, precision experts and perpetual fumblers, religious souls and the odd lewd old sinner—and you are a little horrified that so many working under your same roof for the same length of time should reach this point so incapacitated for the years that are left them. Indusry is awfully tough on people.

"Somebody says to you—'You've got a paper. Write something.' What? Nobody knows exactly. Something nice and interesting and inspiring and stimulating and factual and elevating and that will remind people of things they already know and tell some they don't. You can pick up the information. Don't make it too high-toned and don't use words of more than three syllables. Keep it light and make it a little funny. But give 'em the works, sister. Writing is grammar and spelling and putting a paper in the typewriter. (Like a nickel in the slot machine.) Who takes count of what has to be behind it—the knowledge and charting and selling and the words that are only railroad tracks for the facts?

"You have to start with the facts. So where does that bring you? Right straight to the original questions. You can't get away from answering them. You can't gloss prettily or learnedly around this aging subject—not for industrial readers. You can outshakespeare it without getting a single real reader, no matter how many people's pictures you publish or how many readers' names you manage to work into your space. You have to talk turkey. In plain American.

"And the one plain fact that you have to remember without ever touching is that despite all the whoopdedoo about the progress and humanization of industrv. the people in it will always have to adapt themselves. They are the expendables."

Aging and Idleness

In this field of "retarded senescence," A. J. Carlson has the following to say:

"Nor do we know the nature of the factors that invariably induce gradual aging, apart from disease, preventive overstrain, and accidents. The addition of years to life and more life to the later years of man today is largely due to the discoveries and the applications of modern medicine.

"The physiologic age of the worker is not synonymous with his chronologic age, owing to the individual variables in heredity, mode of living, accidents and results of disease.

"While most workers past fifty or sixty years of age have somewhat less physical strength and physical endurance as well as some impairment of hearing and vision, this may be compensated in many forms of labor by greater skill and experience and the decrease in youthful dissipations.

"By keeping in idleness older workers who can still perform useful labor we are not only wasting valuable human resources, but we are contributing to biologic parasitism and degeneration of human society. For man is no exception to the biologic law that existence without effort, without struggle, impairs the species.

"By forced idleness of the increasing army of older workers in our midst we are forging a dangerously weak link in that large fraction of society whose experience, wisdom and relative unselfishness could guide those with less experience and wisdom. For when a person is shunted out of the dynamic current of life, courage and incentive are at low tide.

"There is also evidence that too little physical and mental activity, i.e. work, speeds up physical and mental deterioration. We do not yet know why, but we can prove that a denervated skeletal muscle does not live long. Hence: work, work, work from your diaper days until death, appears to be sound biological medicine."

Harwood S. Belding submits the following ideas, but does not believe they are "fully substantiated" at the present time:

"We propose that aging is characterized by decreasing ability to meet and compensate for life stresses, both those imposed by the environment and by work. This reduction of the powers of homeostasis, by which the organism maintains its integrity and freedom, is seemingly the primary manifestation of aging. Some description of age losses in bodily powers of adaptation is available, but the story is by no means complete.

"We postulate that exercise of physical and intellectual powers, within each individual's personal capacity, prolongs usefulness and maintains ability to adapt to life's stresses. Conversely, habitual 'conservation' of bodily powers, by avoidance of contact with work and environmental stresses, favors premature loss of the very capacities that are being 'conserved.' The evidence in support of this postulate is incomplete. Furthermore, it is entirely possible that some types of stress and activity have no long-term effects on health, and may therefore be accepted or rejected at will.

"This postulate partly follows from the first and second ones. It is that decreased willingness to face new activities and new situations is a conspicuous characteristic of aging. It seems likely that this fixation of the individual in established patterns can be postponed by selective acceptance of opportunities for new experiences."

Health and Aging

Dr. Belding further says:

"Incidentally, I question the statement in the first part of the paragraph three of The Letter (sent by the Committee to panel members); '. . . since our older group now represents more physical and intellectual vigor than a similar group of fifty years ago. . . .' It may be that the sum total of physical and intellectual vigor is greater only because more people are present in the group. I question whether we have definite evidence that the state of health and competence is higher now than it was fifty yars ago. It seems to me this points up the need for research on well, elderly people, better to understand their capacities and limitations."

Along the same line A. J. Carlson in commenting on our aging population has the following to say:

"I think this is assured by more of science and the better art in medicine, fifty years hence about fifteen out of every 100 people will be over sixty-five years old. I think we can add that this army of older people fifty years hence will be even better qualified for useful work than are the people of the same age today. Thanks to

more science and better art in today's medicine our larger 'aged army' of 1940 is less decrepit than was our smaller army of sixty-five years old 100 years ago." (This was written in May, 1943.)

Ernest T. Boas answers the question propounded by the geriatric letter as follows:

"The questions that you propound are not simple to answer in a few words. We do not know the cause of aging. We know that every species of plant and animal has its own particular life span which appears to be part of the inborn biological equipment of the organism. Furthermore we know that in man longevity appears to be a familial trait, that the members of some families tend to be long-lived, and others short-lived. This suggests that the development of senescence depends on certain genes that control the chemical and metabolic activities of the body. So far we have not learned to recognize, far less to control, these obscure life processes. Research in this field involves basic biological and chemical disciplines. Such studies are steadily increasing and should be supported and encouraged.

Doctors Attention

"In the meantime, we as physicians have the task not alone to preserve and extend life, but to maintain the individual's health during the years that have been added to his life by the advances of medical science and of social organization. The chief bar to progress in the maintenance of the health of the aged has been the fact that physicians and laymen alike still confuse normal aging with the manifestations of disease in the aged. This leads to the assumption that invalidity and disability in older persons are the inevitable, irreversible result of senescence, and that, therefore, nothing can be done for the ailing person. So he is told that he must grin and bear it, and little attempt is made at medical treatment.

"These assumptions are contrary to fact. Few if any persons die of old age alone. Repeated autopsy studies of old people have demonstrated that they die of disease, and that these diseases in the order of their importance are: arteriosclerosis of the coronary, cerebral or peripheral arteries, hypertension, cancer, prostatic hypertrophy, tuberculosis and accidents. These are the same diseases that are the chief causes of illness in middle life. When they occur in elderly persons they merit the same intensive treatment that they receive at younger ages.

"Until very recently arteriosclerosis has been the symbol of aging. Today we are beginning to envisage arteriosclerosis as a disorder of metabolism, closely connected with disturbances of lipid function, and there is justification for the hope that we shall learn how to prevent and treat this major scourge of civilized man, and so it will be with cancer and other diseases of later life. The aging process as such does not give rise to signs and symptoms of disease. It is characterized by a loss in the functional reserve power of several organs of the body and of the complex hormonal, nervous and chemical integrative processes that maintain the homeostatic mechanism of the body.

"We must learn to recognize every deviation from health of the aging person as a challenge to diagnosis and to treatment, and dismiss the idea that it is but evidence of inevitable decrepitude. And when there has been crippling and disability we must employ every resource of rehabilitation of the damaged body. We must cease regarding the chronic diseases of later life as 'degenerative' diseases, for this incorrect assumption leads to the same apathetic and negative attitude that follows when disability and aging are made synonymous.

"An identical approach should be made to the mental disturbances that are encountered among older persons. It is assumed far too readily that mental and emotional changes among the aged are the result of organic deterioration of the brain, and the diagnosis of senile psychosis and senile dementia, are made without adequate foundation. The brains and minds of elderly persons lack the elasticity of response and the reserve powers that they had in youth, so that when an aging person is placed under stress, whether it be social and economic, or whether as the result of infection, heart failure, or malnutrition, orderly function of the cerebral mechanisms may be temporarily disturbed. But prompt and proper treatment of the underlying cause often restores normal function.

"Comprehensive annual physical examinations, geared to detect the earliest signs of disease, and the provision of adequate facilities for the prompt treatment of any disorders that may be discovered are an essential part of a program to preserve the health of older persons.

"Medical treatment alone is not sufficient to maintain the health of aging persons. Society as a whole must do its part to enable its seniors to continue lives of usefulness and of economic independence. All who are physically and mentally competent should have the opportunity to work and to maintain their places as responsible members of society."

Preventive Medicine

The MSMS Geriatric Committee letter brought the following reply from Edward A. Piszczek:

"Being interesting in the field of preventive medicine and public health I know that the future looks brighter for the population because of the advance in preventive medicine. The absolute control of diphtheria will eliminate many chronic hearts in the future. The control of whooping cough will eliminate much bronchial disease including bronchiectasis. The effective treatment of scarlet fever by antibiotics and chemotherapy agents will definitely reduce scarlet fever, otitis media, nephritis, and to a degree scarlet rheumatic fever. However, the broader aspect of old age intrigues me a great deal.

Modulation

"Since 1950 census figures show that Chicago has an all time high of 1,143,000 persons in the 45 and over age group (an increase of 177,000 in the past ten years) and this group constitutes nearly ⅓ of the city's population and since inflation has meant that many of the pension and retirement plans which seemed adequate ten years ago are now totally out-dated and since the older age group is now on the whole more literate and vigorous than a few years ago, it seems like a very good idea to study means of extending the living years of the individual as well as his existing years. Since this is a program which should begin in middle age, a new term should be found and popularized which would embody the concept of preventive geriatrics. Rehabilitation represents only a small part of such a larger program as is becoming necessary.

"For instance, a modulation program could be instituted in industries and occupations where a subtle shifting of man's work in keeping with his altering physical powers is indicated. It would seem that retirement and pre-retirement plans are to become outmoded because of the following factors:

"1. The economic factors which make retirement a hazard rather than an opportunity and make it impossible for a person to work and at the same time do not make it possible for him to do the things he has long dreamed of doing on retirement.

"2. Extended physical activity which makes it unnecessary and unsound from every aspect for us to encourage and enforce unproductiveness.

"3. Medical advances and the idea of 'learning to live with one's handicaps' are making it possible to save many persons with minor heart ailments, etc., from the scrap heap to the advantage of both the individual and society.

"4. The population shift which is the result of the lengthening span of life and means an increasing number of non-productive and idle elderly people to be supported by a decreased number of younger people.

"5. Postponement of senescence seems most obvious in individuals who have the most vital interest in their work and a feeling of being needed for instance, many doctors, nurses, both trained and practical, landscape gardeners, potters, and many other craftsmen, artists, etc.

"6. Newer concepts are admitting the values of experience and mature judgment and making it possible to use older persons for consultation and training of newer workers.

"The whole problem of what to do with the aging population seems to be tied up with the matter of job placement. It is becoming increasingly difficult to get workers to do certain types of routine work. Machines have taken much of the skill and initiative out of many kinds of work. Much of this work is not difficult but because younger people have education and drive they are eager for more challenging jobs and it is hard to find people to do these less demanding, less glamorous jobs. On the other hand, older people who cannot stand the strain of competition and high pressures, would be much more patient and consistent in their performance.

"Older people who are physically able to produce at all would seem to fall into two large groups. Those whose experience and initiative might fit them for consultative, teaching and other passive pursuits; those who by nature and experience would prefer routine work which is less strenuous, less demanding, and less hazardous, than they have done in their prime.

"This shifting of men from one type of work to another is what I would call modulation. It should be based on periodic physical examinations and phychological tests rather than a rigid age line.

Preparation

"Periodic examinations are being instituted in many businesses and in industries, but this procedure has not been used to the fullest advantage. A program of education should be instituted to prepare older people for the inevitable shift in their physical and economic status. What is faced is not feared. Many who have faced the prospect of added years of old age have done so with apprehension saying that they had no desire to live longer 'and be a burden.' An employment program geared to the medical program could accomplish this changeover of persons who reach a point where they cannot continue at their old pace . . . with or without a pension. Regardless of pensions it seems that remaining years of these persons' lives should be productive first because life will continue to be meaningful and satisfying and second because for their health's sake they need a regular pattern of living, getting up in the morning at a regular time, having meals on a schedule and preferably in the company of other people, becoming reasonably tired so that they enjoy rest and idleness when they have it; and third, because it continues their feeling of self respect and independence. Many of the problems of nutrition, personal hygiene and disease are due to the tendency of older people to withdraw or to be put by themselves where they eat alone, feel no need to keep up their appearance, or take an interest in physical well-being.

"They should be taught that they are not 'stepping down' in disgrace and being pushed aside, but are being transferred to another area in which they can live with their handicap (lessened physical powers) with dignity and with realism."

Prevention

Harry Becker believes:

"We must find ways to bring preventive health services to the older population groups, to forestall, to the fullest possible extent, chronic disease which might be arrested or cured. One method might be to develop procedures for objective periodic medical examinations of the employed persons, on the job, in much the same way that many cities have developed methods for examination of school and pre-school children. Through such a procedure, if it could be developed, we might learn whether certain illnesses could be detected early in the course of their development and the employed person could be referred to his physician for indicated treatment. If expensive and prolonged illness could thus be prevented, the service would be a constructive step.

Insurance

"The utilization of Blue Cross benefits, which is tending to push rates higher and higher, has become a problem of mutual concern to physicians, hospitals, employers, and unions. If on the job health education and health screening procedures could be developed on a practical basis it might eventually reduce incidence of use of hospital and therefore tend to lower Blue Cross rates. This approach might tend to increase the use of the family physician for preventive health services and for treatment early in the development of disease. This shift from emphasis on in-hospital care to maximizing the treatment of illness on an ambulatory basis would be desirable from an economic standpoint."

The Rehabilitation Role

The role of physical medicine in rehabilitation and preventive geriatrics, A. B. C. Knudson believes:

"In physical medicine and rehabilitation it is feasible to make every older man and woman more capable, within physical and mental limitations, of being useful to themselves and to society. The important criteria may be enumerated in three categories:

"1. Health maintenance in order to present physical or mental deterioration.

"2. To increase as much as possible, physical stamina and resistance against disease.

"3. To increase self motivation and concentration upon interesting activities.

"The first of these must be accomplished through periodic health examinations and follow-up by the physician or clinic. The second factor is usually realized by strict adherence to a regimen of physical activity within the tolerance of the individual. Calisthenic exercises, reconditioning techniques, and development of specific capacities of the body or groups of muscles when indicated, will all contribute toward actual increases in the total resistance. The third criterion depends upon the mental attitude of the individual and the indicated modification of this attitude when necessary. If the older individual can be motivated through interesting activities, including hobbies, to maintain or increase mental alertness, concentration and aptitudes, a healthy mental situation will usually be effected.

"A very important item is that of nutrition and maintenance of the correct body weight for the person's age, height, and physical condition.

"Statistics show that chronic disease and severe disability increase in direct proportion to the age of the individual; along with this there naturally develops a feeling of frustration and futility on the part of the older patient. In this realm the application of physical medicine and rehabilitation principles and procedures for the prevention, diagnosis, treatment and rehabilitation of geriatric illness and disability has proven itself of inestimable value. This specialty may also be of considerable help in overcoming psychologic difficulties of the aging person.

"To summarize, it is believed that the basic needs in the field of preventive geriatrics can be made only with a dynamic regimen which considers the whole individual

and deals with him in a very humane and understanding manner. Certainly, along with other medical disciplines, the specialty of physical medicine and rehabilitation offers real promise in the prevention of disease and in the rehabilitation of the sick and disabled who come under the category of 'geriatric patients'."

Prevention

Hertha Kraus thought that the factors listed below would be conducive to the delay of the aging process:

"1. Removal of preventable elements of economic insecurity threatening adequate maintenance in the later years.

"2. Removal of preventable elements of emotional insecurity especially in the area of human relations and housing.

"3. Prevention of undesirable and drastic changes in occupation after 40.

"4. Prevention of undesirable or drastic changes in personal setting, tangible environment, during later maturity.

"5. Prevention of necessity of great strain in making personal adjustment to new situations involving considerable reorientation during later maturity (even if such adjustment and reorientation should be financially advantageous promotion.)

"6. Positive programs of developing skills, occupational and leisure time activities, as well as personal relationships which may be expected to remain unbroken despite advancing years and possibly declining powers."

Oscar J. Kaplan further substantiates ideas that have been advanced before when he says:

"My studies lead me to believe that exercise of mental and physical abilities help to preserve them, sometimes even in the face of somatic changes."

Robert J. Havighurst believes that good health and longevity are promoted best by:

"1. A moderate degree of mental activity; e.g., reading, participating in discussion groups, civic activity, hobbies, work.

"2. Friendly relations with a number of people—family members or community members.

"3. A gradual tapering down of physical and mental activity after age sixty.

"4. Substituting of new activities for old ones which must be dropped because of retirement from one's job, loss of husband or wife, et cetera."

Authority

Dr. Ellan C. Potter, eighty-two years young, practitioner of medicine, offers the following suggestions for the prevention of disease and postponement of senescence:

"The individual whose upbringing in the home has emphasized healthful living, good sportsmanship, community service, good citizenship, tolerance, industry and good money management, has a sound foundation on which to build a good life and to escape or defer senescence.

"Lacking such a fortunate birthright and upbringing, the individual enters adolescence (when personal responsibility for one's own well-being becomes a reality) with a heavy handicap.

"The Responsibility of Society. Recognizing that a vast number of young people have not had creative upbringing in the family home, society owes it to them and to itself that the programs of the common schools, high schools, and colleges should incorporate in the curriculum and in group activities the fundamentals enumerated in our first paragraph.

"Creative Community Services should be available such as group work, recreational and sports programs, golden age clubs and family service agencies, denominational as well as non-sectarian, and should be brought to the attention of the young, middle-aged and older persons as a means of maintaining the spirit of youth and promoting good basic physical, mental and emotional health which will delay senescence.

"If Good Health Maintenance is to be a reality, the individual, responsible as he is for his own health maintenance, should have access at his own expense, or through a group insurance plan (or other device) to a qualified physician or clinical group for periodic health evaluation and guidance as to diet and weight in relation to height and age, and to the special dangers inherent in overweight and other detectable handicaps and their prevention. It may also be necessary to supplement the ordinary dietary by vitamins under the physician's guidance.

"Community Activities. Every individual, regardless of age, has a contribution which he can make in his social setting. Such activity, whether within the orbit of the church, school, clubs, civic and political affairs, brings about vital inter-relationships if the individual gives of himself rather than expecting to 'receive' benefits therefrom. By just so much the outgoing personality retains the element of youth and senescence is restrained.

"Financial security is an important element in preventing anxiety and delaying senescence. In the State of New Jersey there are school districts co-operating with banking institutions in a 'School Saving Plan' which creates a sound relationship between earning, saving, and spending on the part of the child.

"Carried into the young adult years, and related to the purchase of annuities, a foundation can be laid for 'financial security' particularly helpful when supplemented by Social Security and Old Age and Survivors Insurance.

"Perhaps 'financial anxiety' after maturity is reached is one of the most potent elements in hastening the development of senescence.

"Solitary living may become a factor in accelerating the aging process and the development of senescence. Companionship with its give and take in daily affairs; the frank criticism of appearance, dress and manner, minimizes the development of senescence. Moreover, it is delightful to note that the youth of today is prepared to accept with pleasure and satisfaction the relationship with their aging elders as 'good scouts' whose life experience has made them valuable members of society and personal friends of the young."

The Plight of the Aging

Says Jess R. Ogden:

"We are glad that the Michigan State Medical Society has become interested in an approach which seems to us pretty important in any study of the problem of aging. It is very seldom that we pause to assess the impact of the community and its customs as upon the individual, although it is pretty easy to inventory effects after one stops to think about it.

"The plight of the aging in communities which are geared to creating an efficient setup for the young is an unfortunate one. For example, we all know that modern housing is not geared at all to the needs of older people, with its steep stairs, small apartments, etc., etc. But, going deeper than that, one discovers many conditions which have probably even more effect. There are the community mores—what pattern of behavior the community expects of its elder citizens: Is a widow expected to wear weeds? Is a retired preacher supposed to

keep on pontificating? Are certain things 'done' by older people? And are certain things taboo? All of these things are particularly ponderous in rural and suburban communities.

"I keep thinking about England, and its strange aversion to central heating—all of the cliches they used the while they became more and more rheumatic. It is in this realm of community mores and of enforced behavior patterns that rewarding studies could very well be made. I am quite sure industry refuses to hire older citizens because it is 'not the thing to do' rather than for any economic or technological reasons. I don't want to belabor the point, but it seems to me that some such considerations might very well go into the building of a 'logical framework' on which to base future study. The older I get and the more I see of the world, the more I respect the power of the community in its impact on the life of the individual."

Geriatric Clinics

Leon Banov states as his impression:

"A practical beginning to the study of the problems of aging should be the development of a series of geriatric clinics, operated upon the lines similar to our well baby clinics, where an aging person can meet a physician properly trained in geriatrics about four times a year. Such clinics could probably render a very useful service, because if properly conducted, considerable education can be given the patient by nurses or educators specially trained in the problems of the aging. Informative lectures and demonstrations to groups of geriatric patients could precede the periodic examinations by the physician.

"For the chronically ill patients—whose numbers are apparently increasing—an institution that would be midway bewteen a home and a hospital and that would cost the community less than a hospital, would be needed for those cases that require institutionalizing. A home visiting service in geriatrics should be provided for such cases as may be cared for in their home."

Leonard J. Goldwater, whose work has been confined entirely to studies relating to types of employment and occupation suitable for individuals having heart disease, incidentally including those of the older age group, says:

"In this connection, I have found that age per se usually constitutes a more serious handicap to finding employment than the existence of heart disease. Limited studies have revealed that among persons of all age groups, there is no evidence that continued employment has any adverse effect on the course of heart disease. If anything, it would appear that those who continue to work have a more favorable prognosis than those who stop working.

"This observation may be germane to the present interest in methods of postponing senescence. Available evidence strongly suggests that if the older worker is suitably placed and remains under proper medical supervision, he will continue to function as a useful individual for a longer period of time than would be the case if he were forced into a state of idleness."

Social and Health Factors

V. M. Hoge says:

"We are in agreement, of course, that there are two phases to the situation: One, that of aging per se; and two, the influence of the disease processes. At the present time it appears difficult to do more than postulate existence of biological, psychological, and personality deterioration having its origin in the genetic constitution.

"I believe there is some evidence from the field of endocrinology and biochemistry that it may be possible to retard certain aspects of the aging process. Watson and Caldwell at Washington University School of Medicine reported reinstatement of earlier functions following certain hormone injections. Adequate intake of protein, calcium and other essential food elements is probably responsible in part, for the improved health and energy status of older people today. Actually, of course, the only real evidence of that improved status we now have is that more people are alive at these ages. This suggests one area in which research is needed.

". . . . . There is increased realization of this relationship between social and health factors, and this is particularly important among aging people because of their circumstances of living. Continued activity is essential to the maintainence of physiological and mental functions. As age increases and conventional responsibilities of adulthood are finished there is a tendency to withdraw from all activities. There is considerable evidence that cessation of activity lies behind a good deal of premature biological and psychological deterioration.

"Personality changes noted in older people include irritability, moodiness, depression, submission to authority, paranoid tendencies, and infantilism. There has not been enough research to know how much to ascribe to organic changes and how much to environment.

"It is known, however, that social factors play a significant role. The needs of older people are basically the same as those of human beings at any age; for sense of usefulness, recognition, companionship, self-expression, social participation, self-management. Many older persons characteristically lose opportunity for satisfying these needs, with result found in the personality changes noted above as well as in physiological deterioration. It is probably true that some older people do not make an effort to maintain health because there appears to be no reason for doing so.

"The implication of these latter paragraphs is that we must find creative social situations and patterns of behavior that will convert the later years into a period of continued personality development, usefulness, and opportunity for self-expression.

Scott Lord Smith injects the following into the discussion:

"Acknowledging in the beginning the enormousness of the problem and likewise its enormous importance, I think we have to admit that we know of no way of really delaying senescence except in the early detection of incipient symptoms and signs. Most of these unfortunately apply all along the line of human existence. The demand therefore, necessitates a better application of our present knowledge to the problems of hygiene and common sense living to the avoidance of excessive eating, overexertion and mental strain.

"The second approach is the reorganization of society so that more aging members of it may continue in active production for a longer period.

"The third is more comfortable and pleasant care of those members of our society who have reached physical conditions necessitating retirement."

Walter T. Zimdahl opines:

"Retardation of deterioration in senescence in general cannot be accomplished by medical means alone. There must be a more vigorous advancement in the social sciences. There should be an extension of the retirement ages which will actually save management dollars, for it is more economical to retire a person at seventy than at sixty or sixty-five. There should be social emphasis on leisure time utilization and a recognition of senior citizens as a valuable part of society. Here at our Institute we are planning to study various problems of aged population, particularly concerning the cardiovascular-renal system. The area of nutrition is also a contem-

plated research program in the aged. We are also hoping to work with a program in conjunction with the State Psychiatric Hospital for prevention of mental diseases."

L. E. Burney writes for the postponement of senescence as follows:

"Senescence is a part of life itself and is not necessarily to be found only in aging people. In fact, the process of aging and the period of senescence cannot be defined in years alone. Though the process in aging is not completely understood, it should be given the utmost consideration which is possible with our present knowledge and that which may be added in the future. The concept that chronic disability is inevitable as age progresses must be corrected in the minds of both the physicians and the public in general.

". . . The responsibility of medicine to the aging originates with the actual teaching of medicine. The medical school has the responsibility of giving the medical student and the graduate physician the benefit of all the knowledge and experience available in respect to senescence, chronic illness, and chronic disability. The teachings in medicine must be shifted in emphasis from the acute remedial illness to those requiring prolonged and continuous medical guidance.

"The key to longer useful life is health; physical, mental, and spiritual. The family physician must enter into the mental problems of his patients as well as the physical. The rejuvenation of the few of which you speak in your letter who have found new mates no doubt has been due to the change in their social atmosphere which has created a new interest in life and has made them feel that they had a useful purpose. A physical examination or, better, a health consultation as frequently and as complete as necessary is fundamental to the prevention of chronic disability and might well lessen the deterioration due to senescence.

"An added duty of medicine today is that of rehabilitation. This should not be construed as rejuvenation but the restoration of independency for the individual to the maximum permitted by his current physical status."

Education and Clinics

Elizabeth M. Black trying to confine her suggestions to the practical issues involved, offers the following:

"Since many of the diseases in the aged seem to be psychosomatic in nature and stem from a realization on the part of the individual that he is no longer an important part of everyday living, and develops symptoms as an attention-getting device. It would seem that establishing an educational program in high schools and colleges geared to the 50-year-old and over, would be beneficial. Not many people past middle life have a desire to enter classes with the college age group. A few of these people have and proved that one is never too old to learn. Secondly, I would suggest establishing of multiphasic screening clinics for the apparently well individual. The average physician does not have the time to completely screen patients when they come to his office for a physical examination. Much of the laboratory work could be delegated to the non-professional group. The clinics could also help by employing the over 60-year-old person who has been retired. Such a program has been tried in one of our hospitals here. Several retired school teachers and others are being used for auxiliary help in hospitals and clinics.

"Many of the people become helpless and senile for no other reason than the fact that they have been treated like invalids instead of being taught to function to the full limit of their capabilities. I feel that the physicians should become more familiar with the facilities in their community which help in the process of rehabilitation. We find that many of the physicians are either ignorant of these facilities or underestimate their value, such as—Visiting Nurses service, Physical Therapists, and Rehabilitation Centers.

"The majority of our old age groups had no opportunity to plan for retirement. They had retirement thrust upon them without warning and we have all seen the result of this in people who have been full of vigor and zest for living. Upon their retirement they suddenly show signs of senescence. Much emphasis must be placed on housing where people can maintain a certain amount of independence in living. Many more people would be able to leave nursing homes if they had satisfactory living arrangements.

"Having observed the chronically ill aged in a welfare setting for the past five years, one cannot help but feel that a great deal of the senility could be prevented if the individual had been given an opportunity to maintain interest and be a part of a family group instead of being relegated to a nursing home where he loses interest in anything other than that is related to his own condition. Much of the crippling following chronic illnesses such as: Cerebrovascular Accidents; Arthritis; Cardiac, et cetera, is unnecessary. Chronic illness itself could be reduced to a minimum by establishing multiplastic clinics and a well-defined program of education.

"I cannot see much use of the drive to halt deterioration in the biologic processes unless there is a definite place in the world for the over 65 year group. I do not mean by that, The Golden Age Clubs which are flourishing all over the country but a definite place where the aged can make a contribution to the community. I have great hopes that in the next 20 years with the programs geared to successful living in the older years, that many of the problems we are now facing will be greatly minimized."

Medical and Nursing Care

Margaret Ranck states:

"More emphasis on hopeful outlook in medical care of the aged sick on the part of grass roots general medical practitioners—Institutes and Conferences in local medical societies. I am overwhelmed regularly at the fatalistic attitudes engendered in nurses by domiciliary or custodial attitudes of many physicians. Physicians seem to need more emphasis in refresher courses on reablement to self help rather than rehabilitation to paid employment.

"Promotion of and provision for community operated housekeeping and visiting nursing services in every community, in old person's own home to carry out the medical plan for the patient and to prevent the admission so far as possible of the oldster to institutions.

"In schools of nursing teaching better nursing care techniques with emphasis on prevention of development of deformities through broader knowledge of rehabilitative nursing for all nurses in all fields of professional nursing, also increasing understanding of the older patient as a person.

"Making broader opportunities available to practical nurses for improving their nursing competence.

"Supervision, regulation and education available to owners and superintendents of homes for the aged, commercial nursing homes, and boarding houses for oldsters.

"The development of community sponsored nursing and convalescent homes with a broad program in medical care, social and occupational interest—these to be located near to old persons, friends and home may or may not be directly connected to general hospital but should certainly have close referral and service relationship.

"I am pleased with the increased awareness of need for preventive medical care in well people in the middle

years of life to prevent or postpone chronic illness in old age."

For Instance

Kathleen Allen writes:

"On Saturday last week, on my way to Philadelphia, I met a woman doctor who at this point is 85 years old. She was on her way to address the annual meeting of a very important women's national organization. She was to speak on the past as it influences the future. This woman doctor has served as director of the welfare departments of two states and as president of a women's medical college in an interim before these welfare positions. After she retired from the second welfare department, she worked to raise funds for voluntary social agencies and she is still serving as a member of the Governor's Commissions on Chronic Disease and Old Age in her own state, as well as maintaining her interest in the American Public Welfare Association as a regular attendant of regional meetings in New York and elsewhere. She attributes her ability to continue this very full life to her personal good health and the fact that she has always been concerned with something that is bigger in its implications than her own emotional or physical problems.

"This is a success story that cannot be duplicated too often. It seems to me, however, that if the right mental hygiene is developed for young people in adolescence and through early adulthood, that there would be a good many more people who might achieve this seemingly triumphant old age. Too many people that one observes have not built up personal lives that are satisfactory to them as they grow older. Too often they have depended on children and other objects of their affection to furnish the satisfaction that they really have to find for themselves at any age. My thinking on this point is conditioned by an older woman who said to me recently, 'I have lots of time, but I have always been so needed until now.' This remark stemmed from her dissatisfaction that her son and daughter-in-law were not keeping her in their picture as much as she had always hoped. Neither was she sharing in the activities of her grandchildren to the desired amount. 'Not being needed' seems to be the let down point in a great many lives as they develop. Apparently too many people have no activities which might round out their lives in order to establish this satisfaction. As they grow older and become more inactive physically, their emotional needs are more evident to themselves and the frustrations often defeat the effective relationships which might still be possible for them with the various generations in their personal orbit. A good deal of attention is now focused on the need for developing hobbies that will take up the time during the period of old age. It doesn't seem to me, however, that hobbies are important enough to replace gradual development of understanding made possible through effective mental hygiene during the formative period of one's life.

"This is probably not a very profound observation but I have been impressed by this educational need over a great many years."

Nursing

Ruth D. Freeman comments:

"I am very interested in the project of the Geriatric Committee of the Michigan State Medical Society relative to the problem of retarding deterioration now associated with senescence; preventing or postponing diseases generally associated with aging. The following suggestions are made essentially from the standpoint of nursing supervision and many of them could be implemented within the structure of the present nursing programs:

"1. Emotional guidance during pregnancy and parenthood.

"2. Reconcile maternal responsibilities and interests with continuing life interests that might be expected to function after children have left the home. For example, I think more emphasis might be placed on having professional women who left their profession temporarily for childbearing keep sufficient contact with their work so they can return to it on a full or part-time basis after the children are grown. Such contacts may be maintained by volunteer work, functioning on committees, or special projects within their professional group or carrying part-time responsibilities that can be fitted into the over-all pattern of home and family care.

"3. Persistent emphasis on reducing fatigue and tension. Such instruction should be an incidental part of all nursing services and would be aimed at the development of habits of relaxation and optimum handling of difficult or frustrating experiences so that emotional integrity is maintained.

"4. Intensive guidance of patients and families when chronic illness appears, to bring about the least possible disruption in the individual's life and the family's response during the period of illness. In terminal cancer, for example, it is often possible by a program of family instruction and encouragement to prevent or cut down the time of actual bedfast status.

"5. Use of all possible instructional and motivational efforts to control obesity. This has profound psychological as well as physiological effects and contributes to social inactivity as well as enhanced danger of illness.

"6. Encouraging family social patterns that will maintain the independence and broad interest of older members of the family. Separate apartments within a house for grandparents which permit them to do their own entertaining and live their own lives with some independence while being somewhat sheltered by the presence of the family represents one example. Social activities directed toward the older age group as sponsored by such community groups as churches, fraternal organizations, et cetera, provide another interest broadening outlet.

"7. Encouragement of family health advisory services by private practitioners of medicine, supplemented as necessary by nursing supervision of the 'well' family. By having the whole family come in as a unit for examination, stimulus is given for more frequent checks on the adult which should provide for early diagnosis of diseases of later life and evidences of need for change in habits of living to build general vitality."

Elizabeth S. Bixler and Margaret Magee contribute:

"Some of the postulates which might come from the discipline of Nursing, regarding the postponement and prevention of disease associated with the aged:

"1. Promotion of individual and community interests and hobbies. Such activities should and could be sponsored by a group of representatives from a certain community.

"2. Formation of a commission, whose representatives would include all health and social agencies of a community. The scope of their work would include a survey of problems, formation of: preventive medicine geriatrics out-patient department where, in addition to medical care, nurses could be consulted on problems of hygiene, modification of daily living, etc.

"3. Out-patient nursing service or visiting nursing service on consultant basis, on problems of modifying environment so as to insure optimum utilization of efforts. Such a problem could simulate our well baby clinic setup and give appropriate services.

"4. Establishment of group activities for the aged at a community meeting place; utilization of group dynamics on such topic areas as health practices, health facilities, civic problems, hobbies, etc. Encouragement

of self government of group of oldsters with consultant service from professional workers.

(a.) Wide development of visual aid material such as movies and television facilities, utilization of radio for the promotion and publicity of the above enterprises, with a 'grass roots appeal' for organization.

(b.) Utilize all these studies and well-organized body of literature from the field of preventive medicine (already available).

(c.) The nurse would continue her role as teacher of good health precepts, enlarging her present clientele to include the senescent citizen who is at present in apparent good health.

"5. Inclusion of all above aspects in the cirriculum of schools of nursing."

General Considerations

Theda L. Waterman believes:

"1. The preparation for later years should start in middle life. This preparation to include:

(a.) Good medical evaluation and doctor's supervision. This to include dental care. There should be special attention to nutrition.

(b.) That individuals be encouraged to plan for their social adjustment. This to include keeping up interest in present activities and developing new interests and cultivation of hobbies; maintaining contacts with church groups, lodges, etc. and maintaining an active interest in community activities.

(c.) Planning for financial security for the later years. Developing of a program which would include pensions, social security, annuities, and such or perhaps a combination of all of them.

(d) Making plans for housing. The development of a program which will not necessitate their being dependent upon their children.

(e.) A program for emotional adjustment. This to include developing an attitude of acceptance of the limitations which come with the later years. The adjustments necessary because of changes in the family group, and if possible maintaining the ability to adjust to any necessary changes.

(f.) Religious or spiritual benefits. The importance of continuing their church contact which can be beneficial both socially and spiritually.

"2. Emphasizing the importance of community contacts and performance or the development of facilities which will make it possible for people to prepare themselves for later years."

Old Age—Health and Medicine

William B. Kountz contributes the following:

"The idea which you have of 'preventive geriatrics' is, I think, a most logical and practical point. My opinion concerning preventive geriatrics is quite hopeful and I believe that we can by careful study postpone the degenerative state that we know today as senescence.

"In the first place, the diseases we associate with aging must be distinguished from degenerative or exhaustive processes. I do not believe any one has ever died from old age but many have died from diseases accompanying old age such as heart disease, cancer, diabetes, etc. Just as youth is accompanied by its physiological deficiencies such as inadequate antibody protection due to lack of exposure and, to some extent protein deficiencies, and its consequent diseases such as scarlet fever, diphtheria, measles, etc., so the geriatric patient with his deficiencies or exhausted biological processes has primary diseases which develop. Also, just as pediatrics has brought to us an understanding of the body deficiencies of younger individuals, so we must understand that there are changes in the body of the person past midlife which bring about anatomical diseases and disabilities at a later period.

"It is necessary therefore, that medicine understand the biological changes and deficiencies and modify them at an early stage so that the killers heart disease, arterial disease and cancer will not take their toll, at least in their present form. It is my opinion that health may be promoted by adequate and proper study and understanding of the body changes that occur with age. It is my belief that the control of these factors is far more important than is the control of the other aspects such as psychological and economic problems because if an individual remains in good healh the other problems of old age do not seem so important. I can point to the experience of individuals whose health has remained good as being those who are adaptable to their environment, both economically and psychologically.

"Our research at the St. Louis City Infirmary Hospital has shown that maintenance of nutrition depends upon:

"1. Proper dietary intake with

(a.) protective measures to prevent exhaustion of body tissue and proper evaluation of such functions as gastro-intestinal tract and

(b.) administration of hydrochloric acid and gastro-intestinal enzymes if indicated and.

"2. Administration of the substance of the glands of internal secretion. Particular attention should be paid to the need for thyroid and sex hormones which are the earliest ones that tend to be exhausted in the body in most instances. In a later period attention must be paid to the function of the adrenal cortex and other glands."

Chronic Disease

Walter T. Zimdahl says:

"Chronic disease must be tackled with as much enthusiasm as is used in fighting acute diseases. The medical profession's contribution should be an increased interest and vigor in the field of geriatrics. Early detection of minor defects with proper care should be instituted. Diagnostic criteria should be implemented and changed so that earlier diagnoses can be made in elderly people. Control and treatment of degenerative diseases should be started earlier. We are in desperate need of many more geriatric centers."

Along the same line, L. E. Burney adds:

"Chronic illness or at least that disability associated with chronic illness can be kept to a minimum with concerted effort by all concerned. Those that cannot be actually prevented must be detected early and brought under competent medical supervision. In addition to the needed medical supervision, the physician must be willing to accept the assistance from the various health and social agencies which exist in his community. It is highly characteristic of the various chronic illnesses that they create problems over and above those of a purely therapeutic concern.

". . . . . In answer to the specific question, 'What would be the possibility of formulating a body of logical postulates from all the disciplines involved that would retard deterioration now associated with senescence and prevent or postpone the diseases generally associated with the aged group?' I would say that this is not only possible but is both advisable and necessary. Such postulates would be for the benefit of the medical profession and could be directed toward the profession itself, involving the training of medical students, and the responsibility of the practicing physician to the ever-increasing problem of chronic illness in our aging population.

"Lastly, I believe that the medical profession must take a more active part in the continued employment of the older person with or without physical disability. Chronological age alone can no longer be the criteria for employment. The feeling of usefulness, gainful employment if such is desired by the individual, is the best

preventive tool against premature senescence and the ills that accompany it. The medical profession has a large responsibility in establishing standards for physical fitness of the older worker. Management and labor alike must be convinced of the potential productivity of the older person whether it be on a part or full-time basis."

In this field of the chronic disease of the aged, V. M. Hoge has the following to say:

"The matter of diseases found among older persons is somewhat easier to discuss. The organism appears to be attacked by diseases resulting from its contact with its environment and by conditions that may prove to be either internal or external in origin. If it were possible to place human beings in a completely hospitable situation, the insult of disease, malnutrition, and accidents might be avoided altogether. This is manifestly impossible, but there is every reason to continue our efforts to attain the closest practicable approximation to it.

"The death rate in the older ages is declining in response to research on tuberculosis, influenza, and pneumonia. There is room for still further improvement and for a great deal in the case of accidents.

"Present knowledge of the long-term illnesses suggests that much can be accomplished that will have the effect of postponing infirmity and disability and, hence, maintaining good physical status over a longer portion of the life span. The major areas of promise are identified as follows:

(a.) Continued research on the etiology, nature, progress and methods of preventing or arresting the long-term conditions may be expected to yield good results.

(b.) Development of a new attitude toward the health of the aging persons, will also yield further positive results. Maintenance of the best possible health consistent with age can be achieved through periodic health assessments, health counseling and education, attention to diet, exercises, etc.

(c.) Careful diagnosis and early treatment will also postpone the onset of severe disability in many cases of conditions that have serious effects if neglected.

(d.) Many conditions, formerly regarded as hopeless, are known now to respond to treatment and to permit a greater degree of activity than we have been accustomed to think. Increased application of rehabilitation procedures may be expected to keep increasing numbers of aging people functional and reduce the need for custodial services."

Nutrition—Housing—Retirement

In my opinion, the next major contribution to longevity will be in the field of nutrition. I believe the present-day studies of enzymes and research in tissue metabolism are of prime importance in the effort to add "more useful life to years rather than just years to life." (Dr. Donaghue was first to use this expression in my hearing, and I credit it to her).

This idea is accentuated by Dr. L. Katz' demonstrations that atheromatosis, at least in chickens, follows local intimal trauma. The improvements in health and prolongation of life by the use of such hormones as insulin, adrenocorticotrophic hormone, thyroxin, and cortisone and such enzyme inhibitors as the sulfas, penicillin, Diamox® have but opened the door, I believe. They have been useful chiefly in correcting pathological internal environment and a large field in perpetuating normal internal environment and perhaps in improving situations now regarded as normal is about to be explored. (SCW)

From the Union Health Center, Leo Price writes:

"Many of the members of the International Ladies' Garment Workers Union in New York City have had the misfortune of subsisting for years on poor nutrition, in bad housing and subject in their jobs to the accelerated stress and strain of piece work produced under great tension.

"The garment industry is a seasonal one with periodic slack seasons during which the workers have a time of enforced rest. The stress of financial insecurity remains, but they obtain some physical release from the tensions caused by the piecework system prevalent in the industry. Our program has shown the great number of degenerative diseases which occur in the population and the ability of these people to work in spite of chronic illnesses, some of an unusually serious nature. In spite of the fact that many workers in this industry seem to give early evidence of senescence, they continue to work because of the need to support themselves and pay for the education of their children.

"A retirement program has been in effect for some sections of the industry since 1946 for members over sixty-five years old. Only a portion of the eligible population has applied for the retirement while the others at the same advanced age retained the will to work and continue on the job. They expressed the fear of being unable to live without work activities because they have very few other interests outside the struggle for existence.

"As of 1952 this section of the industry contained about 54,000 workers of whom 4,500 were over sixty-five years old. From these, 1,400 (31 per cent) applied for retirement benefits.

"When times are good and earning possibilities are high, many older age workers show a keen desire to carry on. When industrial conditions are not good, work intermittent and earnings low, a sense of the futility of trying to work seems to affect them and retirement applications mount.

"This institution also supervises a program of retirement for members totally and permanently disabled who are 60 years of age or older. This has been in effect since 1949. A total of 404 applications have been received (these are limited by the funds available to about 100 disabled workers to be retired in a year.) Approximately 75 per cent of the applicants for disability retirement are found totally and permanently disabled on the basis of very stringent criteria."

Public Health

Theodore C. Woolsey says that the division of public health methods have been increasingly concerned with the public health problems of older persons, and the division is currently engaged in a small scale trial survey of persons who have passed their forty-fifth birthday, to determine the attitudes toward employment of those not now in the labor force, and, particularly the extent to which their poor health, or beliefs about their own health, are deterrents to seeking employment.

"This study is being undertaken by the division at the request of a committee on the working capacities of older persons, of which I am a member. The committee has suggested in an interim report a series of studies in this area, some of which are not studies appropriate for the public health service to undertake. This particular study, however, seems within our subject matter field. Hence, the division agreed to carry

through at least a thorough field trial of an interview. We cannot say at present whether it will ever be carried beyond that point. However, we believe that because of the hypothesis frequently put forward in recent years that older people

(a.) Are needed as productive members of society, and

(b.) Will age less rapidly if permitted to be more useful, it is important to determine how strongly the older people are motivated toward gainful employment and the extent to which their health is a factor. . . . . .

"From the foregoing it is obvious that our orientation towards the problems of 'preventive geriatrics' is primarily that of fact findings for the use of others. One of the disciplines that must certainly be involved in projecting 'a logical framework on which to base future study' is that of the statistician. We feel that there is as yet a relatively small body of factual knowledge to which one can turn for good hypotheses. Hence, we should like to see an encouragement of careful fact-finding studies by any and all organizations that have the resources to conduct them. In our experience it is almost hopeless to depend upon data already collected for other purposes. Every once in a while one does have the good fortune to find a suitable data already at hand, but for the most part studies of chronic disease prevention and the postponement of senescence have to be planned ad hoc."

Research

Cecil G. Sheps points to the Seminar on Needed Research in Health Care which was held at the University of North Carolina in Chapel Hill, September, 1952, as a source of some pointed concepts relating to the subject at hand. The great increase in the life expectancy of man—has brought about a drastic change in the nature of the major health problems of the nation.

"In sharp contrast to the situation at the turn of the century, today, more than two-hirds of our deaths are caused by chronic illness and 60 per cent of all disability is due to chronic illness. Prevention (in relation to health problems) in many instances may prove to be dependent upon ability to alter or improve social or environmental factors. Such an extension of research would fuse the physio-chemical knowledge of man's structure and function in health and sickness with the knowledge obtained by the study of man in his social relationship, modes of life, and of the varied and complex factors now recognized as strongly influencing his physical and emotional health, his productivity, and his total well-being. It is presently recognized that human beings and communities vary greatly in their reactions and adjustments to environmental influences and in their ability to realize their health potentialities. Furthermore, social factors have an important bearing on the alteration of behavior and of attitudes which is intimately related to health. Therefore, research is needed to delineate the influence of such variable factors as family and group interactions in a community, modes of living and other social patterns on health, health practices, and health services."

In speaking of disorders of the heart and blood vessels, the concept is shown in the following statements:

"Heart diseases, however, are not merely a consequence of more years of life. . . . . "Fat men are more prone to heart disease than thin men, so diet is important, but being thin provides only a small measure of protection.

. . . "The study of these pre-disease characteristics of modes of life and individual physiology, followed through to the actual appearance of disease, cannot fail to yield invaluable clues as to causation and mechanics, as well as to provide empirical means of predicting and altering or even preventing the causes of heart disease.

"Although a great amount of significant laboratory and clinical research is now being done on the problem of cancer, a group of promising leads is being neglected. These leads stem from the fact that cancer occurs more frequently in certain groups of the population than in others. For example, cancer of the stomach affects men much more commonly than it does women; it strikes unskilled workers twice as commonly as persons in professional or managerial positions. Cancer of the lung—a disease which is increasing rapidly in the United States—occurs four times as frequently among men as among women; it occurs at a very high rate among persons exposed to certain chromate-ore operations or radioactive ores. Cancer of the cervix in women affects low income groups to a much greater extent than upper income groups.

"All these facts—and many more—suggest that cancer is associated with a variety of social conditions. Hygienic practices, occupation, nutrition and similar factors should be studied to determine their relationship to cancer of the various organs. Identification of these factors cannot be made in a test tube or under the microscope; they must first be studied in a community laboratory where observations of people exposed to certain social conditions can be carried on over a long period of time.

"Many diseases, including most of those which are now af greatest importance in terms of numbers of victims, have some kind of relationship to age. Age and the diseases which often appear in older people are not the same thing or a single complex. Age must be studied as an independent variable if the role of time and continued risk and exposure are to be understood in either a purely scientific or a purely practical sense. Research programs should be adjusted to this end and studies of the fundamental processes of aging itself, and their relation to disease development, need enlarged and long continuing support. Long term, multidisciplinary studies are needed to answer vital questions about the aging process—questions that range from the dynamics of cell structure and function to the problems of adaptability under different psycho-social circumstances."

General Factors

Berwyn F. Mattison's suggestions for the prevention of disease and postponement of senescence follow:

"1. More study in the relationship between diet, overweight, and the occurrence of heart disease and other degenerative diseases. We are at present initiating studies of overweight in the schools of Buffalo with the hope that we may be able to at least establish a baseline within our school population.

"2. Based on the results of such studies, continuing intensive community-wide health education aimed at the prevention of overweight (if that is indeed associated with degenerative diseases); and also emphasizing the increased need for medical check-ups amongst people who are overweight (with a special attention to detecting heart disease and diabetes).

"3. Recreation—through the adult education activities of the school departments to attempt to encourage development of productive hobbies during middle age so as to reduce the emotional impact of 'retirement' later on.

"4. Better regulation of and extension of the facilities in nursing homes for the elderly and chronically ill. They have recently been put under the supervision of the

County Health Department here and some progress has been made in improving nutrition, medical records, sanitation standards, and recreational facilities.

"5. We need to continue the barriers against syphilis, diphtheria, and other acute communicable diseases which did in the past contribute much to the problems of the chronically ill later in life.

"6. A more constructive approach to the problems of alcoholism, both from the point of view of primary prevention through education in the elementary and secondary schools and also through the provision of adequate clinic facilities with social work follow-up for the rehabilitation of chronic alcoholics.

"7. Encouragement of the systematic co-operation of the private practitioner of medicine. In carrying out 'health examinations' in his private practice; so as to provide periodic, complete medical check-ups for the aging adult who is not disturbed by distressing symptoms of any specific disease.

"8. Incorporation of screening techniques in the community services now being offered. An example of this would be the use of microblood glucose tests to detect possible diabetes, review of chest survey films for cancer and heart disease as well as tuberculosis, full utilization of blood pressure determinations and other simple techniques as widely as possible in clinics and all hospital admissions."

Nutrition

Nutrition in the aging individual becomes important both from the standpoint of the advancement of senescence and its relation to chronic disease.

Charles S. Davidson says:

"The Council on Foods and Nutrition has been deeply interested in nutritional problems in old individuals. I think it is fair to say that aging process is accompanied by many disturbances of nutrition, but that a great deal more work must be done before the facts become clear. There frequently seemed to be alterations in appetite, food intake, probably in digestion, absorption and utilization of nutrients. Which of these is of paramount importance and which can be altered by suitable therapy is as yet little known as far as I can find out."

Three postulates are offered by James M. Hundley which in his opinion have a firm basis in fact which can be expected to result in major benefits during senescence. These are:

"1. Prevention of obesity in the twenty to fifty age group, and weight reduction for those already obese. Such a program, if effective, might be expected to lengthen the life span as much as four years, and to result in major improvement in health and vigor.

"2. Increased attention to that segment of the geriatric population which subsists on grossly indaequate rations. These are highly individualized problems, but by using a variety of approaches, social, economic, psychological, and medical, much can be done.

"3. Increased attention to proper diet in those with chronic illnesses as a means of increasing vigor, sense of well-being and maximum resistance to disease.

. . . . . "In particular one would like answers to questions such as these:

"1. To what extent does the maintenance of maximum bone calcification from good diets in childhood and adulthood contribute to prevention of osteoporosis in the aged?

"2. Do maximum gains in height and weight during childhood necessarily mean a longer and healthier life?

"3. To what extent does adaptation to inferior diets during adulthood contribute to the ability to maintain health on seemingly grossly inadequate diets during senescence?

"4. Is our present national average diet of 11 per cent of calories from protein, 40 per cent from fat and 49 per cent from carbohydrates optimal for long and vigorous life and for the prevention of diseases such as diabetes, atherosclerosis, hypertension, et cetera?

"5. Does the maintenance of a high vitamin intake during adulthood have any influence on longevity or on vitamin requirements during senescence?

"6. To what extent do nutritional insults acquired during childhood or adulthood influence nutritional requirements or disease processes in senescence?"

Arthur H. Smith comments:

"In asking for 'suggestions for the prevention of disease and the postponement of senescence,' you have given me a difficult task because my chief interest is in nutritional biochemistry and this important factor in preventive medicine becomes operative a long time prior to the period commonly covered by the term 'senescence.' In the first place, years alone do not necessarily measure biologic aging; endogenous factors are such that some individuals appear almost youthful at an age where others show a detectable decline in physical vigor and activity. Of the exogenous factors influencing aging, I believe that nutrition is one of the most important. True, certain physiologic activities involved in nutrition do change with age; thus the secretion of digestive enzymes and of gastric acid decrease slowly, a lessened flow of bile may diminish the efficiency of the absorption of fats and fat soluble vitamins, a slower circulation prolongs the time of transport of nutrients from the gastro-intestinal tract to the body cells and decreases the deficiency of removal of the waste products of metabolism. Nevertheless, the principles of good nutrition which have been so extremely successful in their practical application in the field of pediatrics are essentially the same for the person in old age.

"One cardinal fact stands out, namely—that the aged malnourished patient is reaping the harvest of his yesteryears. The results of poor nutrition are more often than not insidious in their operation and so by the time old age has arrived, there may have been established functional and even structural lesions which are the consequence of poor dietary habits begun years ago. Another factor in poor nutritional state in older persons, has a psychological basis; remembering the food budget restrictions of their youth, the aged often plan a restricted dietary. Or, in many instances, finances may actually be limited in old age. Again, the mental and physical activity involved in the planning of adequate meals, often for one person only, may be more than seems justified by the apparent needs and the tea and toast type of meal becomes a routine.

"The other side of the picture is that of obesity in the aged. Inasmuch as this condition is most often due to excess consumption of food energy (calories) it would seem somewhat more readily controlled. The increased incidence of the degenerative diseases in this group and the rapid increase of mortality with overweight is well known.

"The principles of good nutrition have been more or less widely applied in this country for at least a third of a century; it may well be that the increase in life span of our population is, in part, a reflection of improved over-all nutrition. If this is true, it is not too much to expect, within another generation, a reduction in the diseases of old age and with it a postponement of senescence. Certainly aging need not be synonymous with degeneration."

Regarding the association of the chronic diseases in the same person and their association with overweight, Jean Downes says, "At the present time much attention

is being drawn to the problem of obesity in the population and its effects upon morbidity and mortality rates. According to Chapman, 'study after study has shown that the mortality rates among obese people are higher than among people of normal weight.' It is of definite interest therefore to learn what chronic conditions are significantly associated with overweight.

. . . "Among males the proportion classed as overweight increased markedly up to age fifty-four. After age fifty-five there was a slight decrease, the proportion varying from forty-two to forty-nine per cent thereafter compared with 55 per cent at the ages forty-five to fifty-four.

"Females were similar to the males in that the proportion of overweight persons increased markedly as age increased. However, from 65 to 80 per cent of the females at ages thirty-five to sixty-four were classed as overweight compared with only 49 to 55 per cent of the males at those ages. Moreover, females showed a much greater tendency to very excessive overweights than did the males; that is, 30 per cent or more above the standards used.

. . . "It is apparent from the data presented here that examination of the experience of a cross section of a sample population in the Eastern Health District of Baltimore confirms the impressions gained from the practice of clinical medicine. From their experience with patients, physicians have noted that patients with osterarthritis are usually overweight, gall-bladder disease is usually more common in obese persons, diabetes is associated with obesity, and that hypertensive vascular disease is frequently associated with obesity.

"Obesity may then be the predisposing factor which brings about the significant association of certain conditions in the same person. Heart disease and gall bladder disease may be cited as an example. Study of the overweight population brings out this fact most strikingly.

In summary, "Data presented in this report indicate that certain chronic conditions occur with greater frequency in the same person than would be expected if such conditions were distributed at random in the population.

"Those where the association of the two in the same person was found to be statistically significant are as follows: Heart disease and gall bladder disease, heart disease and diabetes, hypertensive vascular disease and arthritis, and psychoneurosis and gall bladder disease.

. . . "The chronic conditions found to be significantly associated with overweight, 10 per cent or more above the standard used are, heart disease, hypertensive vascular disease, arthritis, diabetes, and gall bladder disease.

"The study of the overweight population brought out the fact that obesity may be the predisposing factor which brings about the significant association of certain conditions in the same person."

Margaret A. Ohlson says:

"As you may know we have had a long time research project on the nutrition of women from ages sixteen through ninety. This project has been set up on the basis of a twenty-year plan with provisions of regular recontact of subjects. We are attempting to find out as much as possible about the food habits of a vigorous group of women and to relate these food practices with their general health and evidence of nutritional reserve over a period of time.

"There are a few findings which should be of interest in terms of the clinical management of older individuals and which should contribute to plans for further research in this field.

"1. Overeating with respect to calories is the most common nutrition defect which we have found in in older women of Michigan and adjacent states in the north central areas. Caloric overfeeding does not always mean that the individual's nutrition has been protected since there is marked tendency among many overweight individuals to eat a preponderance of carbohydrate food so that the total intake of specific nutrients would be quite low.

"2. We have tested the apparent requirement for protein, several minerals, and vitamins using accepted techniques. We find the capacities of the older individuals to utilize these nutrients is usually good, but that a few of them require intakes in excess of those suggested by the Foods and Nutrition Board for normal adults. A possible exception to this statement might be made in the recovery period of disability illnesses.

"It is quite obvious in comparisons of earlier work that the total calorie requirement of adults at all ages, with the possible exception of those individuals who are over seventy, is lower than it was fifty to seventy-five years ago due to the development of labor saving devices. We badly need direct experimental studies of the energy cost of work of women utilizing modern household equipment in order to verify and extend the findings of food intake.

. . . "We have been particularly concerned with the tendency of many individuals to take large amounts of vitamin preparations and ignore the diet completely. These preparations are never complete with respect to the specific food need of the individual and we are getting some evidence that they may place a tragic strain on the metabolic and excretory functions of some elderly people. There is nothing in our evidence to indicate that an older individual cannot be well fed with ordinary food if some choice is made in selection and preparation."

Blanche E. Lenning supports the contention of Dr. Ohlson and agrees with us:

"If something constructive is to be done to make the later years of life more worthwhile we must begin to work with the 'younger' older people."

"If we knew a little more about the nutritional needs of the individual patient, at what levels malnutrition and obesity have their beginnings and all the sequelae of the deficiency of a single food element, we might develop a lead on some of the so-called degenerative diseases usually associated with senescence.

"Among prisoners of war who have been on grossly inadequate diets some develop more serious deficiency diseases than others, some die and others survive. This is hard to explain. And what happens twenty years later? Will such malnourished individuals show a greater tendency to degenerative diseases than the average population?

"Will a decade of inadequate intake of a particular vitamin increase the frequency of other disease manifestations in later years? There is some evidence to indicate that lack of vitamin B6 or pyridoxine hydrochloride in the diet may result in impairment of normal growth, various degrees of stomatitis, various neurological disturbances ranging from anorexia through drowsiness to lethargy, faulty protein and lipid metabolism which may play a role in arteriosclerosis and impairment of the production of antibody protein which may increase vulnerability to infection." (CS)

Psychiatry

Psychiatry as it concerns the older individual is touched on by George S. Stevenson when he says:

"I am particularly intrigued with the fact that so many descriptions of senile dementia speak of the variability of confusion in the patient. Reference is made to the lucid intervals. I think we all recognize that if the confusion and defects of memory of these patients were due to destruction of brain cells we could not expect to find these lucid intervals. The evidence there-

fore, would seem to lead us to the conclusion that the defects are to an important degree functional, that is, for perhaps metabolic or other reasons the existing tissue is not able to function at its best, that variations in conditions allow it to function intermittently. This is something that needs careful research attention and perhaps experimentation so that the variations in conditions under which the patient lives, nutritional, social, et cetera, can be correlated with his mental state.

"I also feel that we should follow the lead provided in the fact that it is recent events for which memory tends to be lost first. According to this we should attempt to retain in the daily life of the patient those things which are more remote in his experience, familiar people, familiar furniture, etc. On theoretical grounds it should be expected that the confusion of the patient would be increased when he is removed from familiar things as he is when placed in a State Hospital."

Dr. Stevenson further quotes from his statement for The Hearing of the New York State Joint Legislative Committee on problems of aging as follows:

. . . "The problem before us as I see it, does not include those aged persons in the mental hospitals who are primarily long-standing cases of schizophrenia who have been in the hospital for many years. . . .

"We are concerned chiefly with the patients diagnosed as senile dementia and cerebral arteriosclerotic. . . .

"We next want to be clear as to what our concern is with these groups. Are we interested in them as sick people? Are we interested in all possible ways of ameliorating their condition? Or are we primarily interested in their cost to the public, their occupying beds in our mental hospitals, and the viewpoint that they are near the end of their careers and therefore not worth much and not worthy of serious investment.

. . . "I would assume that if an old person is mentally disturbed to a degree warranting treatment in a mental hospital that he has just as much right to that treatment as any other person whose mental disturbance is equally serious. . . ."

The seriousness of the problem to those affected is commented on further:

"Applying the first criterion to the senile and arteriosclerotic psychosis we find that these are most serious disorders, disorders that are ordinarily fatal. Life expectancy on the average being a matter of months after hospitalization. These disorders under the limitation of current knowledge, are chronic and they tend to be considered hopeless. This defeatist attitude has resulted in very limited research activity. The families tend to abandon these patients as hopeless, or if they are at home treat them with impatience. They are ready to shelf them, push them out of their lives. There is a tendency even for the states to shove them out of the usual mental hospitals into separate hospitals for senile patients. This is in effect abandonment by the state, since the recruitment of personnel for such institutions is most difficult. There is also a tendency to establish special buildings for senile patients in existing hospitals. This makes sense since buildings can be constructed which are more suitable to the limitations of these patients. If these were young people who had similar handicaps rather than old people, the public could be very easily aroused in protest.

. . . "Senile and arteriosclerotic psychoses are a serious social problem. They are disruptive to the family, as are any psychoses. In the early stages the individual is apt to squander his resources and become socially dependent. They do contribute to the public burden of nonproductive people and the large tax burden carried by the public.

. . . "We find that there are many promising leads to research in the field of metabolism, endocrine function, organic pathology, and psychopathology and treatment, but these leads are not being pursued very vigorously. There is great need for funds devoted to research in this field and for conferences providing an exchange between investigators. We need to know more clearly than we do what the effects are of removing a person whose memory may be good only for more remote experiences, from home and family and from his familiar haunts and placing him where his only hold on reality depends on his retention of memory for recent events. Does this produce more confusion and hasten deterioration? We need to know the meaning of the lucid periods that occur in these cases. Are they due to metabolic fluctuations? Can we understand these enough so that we can control the metabolism of these patients sufficiently to insure lucidity for longer periods? There is reason to be hopeful about the contributions of research, but currently these contributions have not reached a point where they are easily translatable into techniques of treatment. Research is our immediate problem.

. . . "Society is rather hardhearted and hardfisted. This attitude, I believe, is however more characteristic of North European than South European and other peoples. Mexican families do not abandon their old people as readily as do we, unless they have lived among us long enough to learn to do so. Our Porto Rican citizens are much more sensitive to old age and our Southern negroes maintain a warmth that many of us have lost or never held. Fundamental to our attitude toward the ills of old people is our placement of a low level of value on human worth in the declining years. If we take another illness, such as leukemia in a young person and describe it we would find ourselves confronted essentially with the same qualities as are found in senile dementia or arteriosclerotic psychoses. It is chronic, fatal and an immense burden to the family. With the young patient, we have great feeling; with the other, little. This is a factor that has to be taken into account. The treatment of old people is a yard stick of our civilization. Is it sturdy or weak? Does it show that we are likely to withstand the tests to which our humanity is subjected in many aspects of life today? This is more than a problem of the declining years of 20th century Americans."

Daniel Blain comments:

"The subject which you are discussing, 'preventive geriatrics' is one of which is of great interest to me, although I am not necessarily the best informed person on it. I believe that as far as psychiatry is concerned and the emotional condition of old age, there is probably a better chance of preventing hospitalization of geriatric patients for mental illness than for any other age group. In other words, prevention has a better chance here than in any other age group that I know of.

"Naturally, I am not referring to the organic conditions, such as arteriosclerotic deterioration and other things of that nature, since no one has yet discovered the cause of prevention of arteriosclerosis of the brain, that is something we must leave aside temporarily.

"I am, however, referring to more generalized effects of aging which are seen in mild and sometimes severe loss of memory, accentuation of personality traits such as aggressive or passive tendencies, tendency toward confusion, misunderstanding and misinterpretation of events going on around sometimes due to poor sight or hearing, and the most important part of the whole complex, namely—the frustrations which people of advancing age are forced to put up with both at home and in the world surrounding them.

"There are some programs going on now which indicate that elderly people who have an opportunity to keep busy and interested and to work among those who

understand and appreciate them show a much reduced rate of mental hospitalization. The small houses of today prevent the proper taking care of three generations in one residence, the fast pace of modern life, the frailities which multiply the stresses which people are forced to accept, the hidden organic conditions such as weakness, aches and pains from lack of calcium, and other types of deprivation, all of these make old age a very difficult problem to put up with and face. In addition to that, the downhill end of life with constant struggle to put off ill health and face final death are not the most optimistic periods of life by any means. Yet, I am convinced that the opportunity of assisting elderly people to put up with these stresses and strains, to handle their deprivations and frustrations, involves a much simpler form of program and is far more practical than any that we now have for assisting youngsters to grow up in more hygienic homes and, in general, to control the environment of the people at an earlier age.

"Types of care for elderly people range from different forms of institutional care which, in my opinion, should not really be hospital care but rather nursing home type of care with sympathetic personnel to assist them with the aid of volunteers and the use of other methods of keeping them in touch with the community. It also involves assistance to those living at home to be away for part of the day, to maintain their interest, it involves a certain amount of family co-operation which can be obtained perhaps fairly successfully by causing other members of the family to recognize and assist an elderly person rather than criticize them when they become feeble or confused, overly anxious, or short tempered."

Heredity

James V. Neel says:

"Inasmuch as the chronic diseases are seen with a disproportionate frequency among the older segment of the population, many of the statements made in that summary of a paper titled 'Heredity in the Prevention of Chronic Disease' are applicable to the problem at hand. There can be no doubt that genetic factors are of importance in the development of certain types of cardiovascular disorders, diabetes mellitus, a variety of neurological and ophthalmological disorders seen in the older age groups, certain types of arthritis and even some of the malignancies which predominantly affect individuals in the older age groups.

"It is one thing to recognize the role of heredity in these various diseases; it is quite another thing 'to do something about it.' The best advice would of course be to pick one's parents with care. Seriously, since legal strictures on human reproduction are obviously out of the question, then it would appear that the chief contribution which the science of genetics can make to 'prevention of disease and the postponement of senescence,' is to aid in the prediction of which individuals are unusually susceptible to the development of particular types of disease. The concentration of attention upon such individuals carries with it the possibility of a very early detection of particular diseases, at a time when irreversible pathological effects have not yet developed. Diabetes is a case in point. There can be no doubt as to the familial concentration of this disease. Ford and Glen have demonstrated that in screening programs, the unrecognized incidence of diabetes is five times as high among the relatives of known diabetics as it is among the general population. Consequently, the regular testing of individuals who are hereditarily predisposed to the development of diabetes carries with it the possibility of detection of early cases of diabetes with the corollary possibility of bringing the disease under control at an early stage and thus retarding the pathological sequelae of diabetes mellitus.

"In summary, then, while I feel that the facts of heredity supply at least a partial explanation of why certain individuals appear to age more rapidly than others and become subject to a variety of chronic diseases of old age, I do not feel, given an elderly group, that the science of heredity offers any practical solution to their problems, except to indicate to a limited extent which individuals are subject to the development of particular diseases."

In the field of prevention of more specific diseases numerous comments are listed below.

Proctology

J. Peerman Nesselrod submits the following:

"Since polypoid disease of the large bowel is potentially pre-cancerous, and since it is asymptomatic early, it behooves the physician to adopt the slogan that no physical examination is complete without proctoscopy. To this should be added careful x-ray study of the colon. If such practice were adhered to it would be possible to prevent many cancers of the large bowel and to detect many more at a time when they are amenable to proper surgical management. The benefits to the geriatric patient are obvious."

Orthopedics

In the field of orthopedics, Edward L. Compere comments:

"Orthopedic problems associated with the process of aging are indeed numerous; they involve muscles, ligaments, and the entire bone skeleton of the human body. The reasons why some individuals grow old biologically, while still young from the standpoint of the years which they have lived, are not clearly understood. Deficiencies in secretion of certain of the glands of the body, particularly the sex glands, have of course been suspected for a long time. Dietary deficiencies undoubtedly play a part. We have learned that much can be done to relieve the symptoms of generalized osteoporosis, so often present in patients sixty years of age or more, by administering a combination of sex hormones, vitamin D in high concentration and a diet which is rich in protein and calcium.

"Conversely, it would seem to be a reasonable assumption that if the addition of any one or all three elements referred to above does have an ameliorating effect and produces an increased sense of well-being, lessening of pain in the back or in other weight bearing portions of the body, the earlier recognition of deficiencies in the diet or of glandular deficiencies and an attempt being made to correct those conditions might delay for a long time these evidences of senescence such as senile osteoporosis, degeneration of skeletal muscle with scar tissue infiltration, stiffening of ligaments, et cetera. Although a vast amount of literature can be found dealing with such questions as calcium and phosphorus metabolism, protein metabolism, et cetera, we are still lacking in many of the answers needed in order to obtain the knowledge necessary for outlining a really comprehensive program which might be expected to prevent or delay some of the distressing conditions affecting the orthopaedic tissues and functions of the human body.

"Studies which would make possible more accurate answers to those questions would be expensive and could only be financed by one of the very large foundations. Certainly, however, it would be worthwhile, and it is hoped that a program of study will be mapped out by your committee. I shall be most interested in reading the article when it does appear under the title, 'Preventive Geriatrics'."

Physical Medicine and Rehabilitation

The contribution of Michael M. Dacso and Howard A. Rusk from the angle of physical medicine and rehabilitation is as follows:

"The nub of successful prevention lies in early detection and correction. The shortcomings of the mass and spot health surveys are evident but it must be admitted that such studies have contributed a great deal to the early discovery of many conditions. It has been recommended by various health authorities both in this country and abroad that permanent documentation of the health histories of every individual in the population would greatly help the fight against chronic disabling disease. The various recommendations differ in technical details, but they all agree on the basic principle that every individual should have a document on which all the essential health events throughout his life would be recorded. Starting from birth, a complete record will be maintained to include all immunizations, diseases, accidents, and operations. Realizing that in many cases it would be undesirable to have the patient possess detailed confidential medical information, such entries should be limited to a mere general reference to the nature of the disease, or test, and the source (private doctor or hospital) from which more information can be obtained. The entry of such data as time spent in the tropics, prolonged exposure to industrial hazards, et cetera, should also be included.

"The introduction of rehabilitation in clinical medicine has given a tremendous boost to the prevention of disabling conditions so common in the later years. The properly rehabilitated young polio patient, or one with rheumatoid arthritis, if adequately followed for several years is very unlikely to develop disabling deformities. It is important to remember that in the younger years patients suffering from various neuromuscular diseases learn certain 'tricks'—often physiologically undesirable—to compensate for the loss of function. In the latter years, however, when powers—both physiological and psychological diminish—compensatory mechanisms no longer function effectively and the disability becomes progressively worse, finally confining the old patient to bed. It is the function of rehabilitation to prevent such unnecessary occurrences.

"In a previous publication 'Clinical Problems in Geriatric Rehabilitation' one of us gave a practical clinical classification of the geriatric patients who can benefit from rehabilitation.

"1. Obviously handicapped patients (hemiplegia, arthritides, fractures, amputations, and neuromuscular diseases).

"2. Those chronically ill without signs of a manifest disability (chronic cardiacs, chronic pulmonary diseases, etc.).

"3. The elderly persons who are not obviously ill but who have impaired physical fitness.

"It is in the third group that the preventive aspects of rehabilitation are presently most neglected. In many cases the self imposed, illogical and unnecessary physical inactivity together with an insufficient diet will cripple the older patient without any underlying pathological condition. The physical medicine and rehabilitation specialist is prepared to evaluate objectively the patient's physical capabilities and, if need be, improve them with properly applied and graded physical activities.

"A more intensive concentration on this third group of patients could prevent a great number of them from needlessly crossing the line between a useful and physiological senescence and a useless and burdensome senility.

"The great problem of incontinence of the aged can very often be solved by using the well proven methods of bowel and bladder training. Keeping the patient dry and reasonably active is the best preventive against bed sores which are known to be one of the major complications of the disabled bedfast older patient."

George T. Harrell, believes:

"The approach considering geriatrics and the problems of old age as the job of the general internist or practicing family doctor rather than a specialist in geriatrics is a wise one. My comments might be read in that light.

Medicine

"I have been particularly interested in the field of infections. I have no idea why elderly people seem to be particularly susceptible to acute terminal infections with Escherichia Coli or as to why they are particularly susceptible to Type III Pneumococcal and Friedlander's respiratory infections. Chronic urinary tract infections are also extremely common but I do not know that any particular organism has a greater affinity for elderly people than for other age groups. I've no idea whether the mechanism which results in these infections is the result of some defect in the host resistance on the part of the patient or whether some common denominator in the growth requirement of these organisms is met by elderly individuals. I presume the relative resistance to viruses of older people is the result of acquired immunity from chance exposure over periods of years. In any event, all of these factors are susceptible to proper experimental investigations. Another point concerned with infection in elderly people is the danger of repeated use of antibiotics, especially the newer broad spectrum ones that are administered orally. The development of drug-fast or antibiotic resistant strains is not as great a danger I believe as the interference with nutrition of the patient. I believe there is increasing evidence that these antibiotics of which aureomycin may be taken as a type interfere with intracellular enzyme systems of the host in some fashion. You are, I am sure, familiar with the fact that aureomycin is a growth stimulating substance for many animals and plants quite apart from its anti-infective action. How this observation would be translated into practical application in geriatric patients I do not at the moment see but I think it does give us a hint as to the type of enzyme system that might be involved. Maintenance of proper nutrition in elderly individuals is a great problem as you know, whether or not drugs are given which could interfere.

"The problem of nutrition in geriatric patients I am sure is well known to you. You doubtless are obtaining other comments in this particular field. The dangers of obesity as far as the circulation, the susceptibility to diabetes which in turn lowers resistance to infection has been stressed many times. The under nutrition of elderly people as a result of food fads or gradual restrictions of the variety of foods taken in the diet also needs to be considered. How much under nutrition contributes to the susceptibility of older males to tuberculosis is not clear. I should have mentioned this unusual age susceptibility of men past sixty in the preceding paragraph. It is not clear whether the osteoporosis seen in so many elderly people is a result of the hormone imbalance or the result of nutritional disturbances. Many elderly people seem to metabolize vitamins, minerals and proteins in a normal fashion. On the other hand, there is a good bit of evidence that on standard diets bones will decalcify with disuse and that fractures will not heal if the protein going to make up the matrix of bone is not formed properly. Studies on the bones of children have seemed to indicate that in many instances the mineral deposition is more or less of a passive physiochemical process dependent upon a proper protein matrix. I would not expect that achlorhydria, which of course increases greatly with advance in years, would seriously inter-

fere with nutrition. I do not recall that any evidence has yet been presented to indicate that the intrinsic factor also diminishes as achlorhydria develops in older people. They may require more B^{12} in the diet but I think they would still absorb it.

"I do not feel qualified to comment on the circulatory disturbances of old age—particularly arteriosclerosis or atherosclerosis. I have, however, been interested in the problem of myxedema. In this disease a considerable degree of atherosclerosis may develop at an early chronologic age; it seems to be exactly comparable to the atherosclerosis developing normally at an older chronological biologic age. As you know myxedema disturbs the protein metabolism as well as the cholesterol metabolism. Older people have diminished thyroid activity though they do not necessarily have demonstrable myexedma. It may be that further observation of the changes in the lipo-protein complexes, their relationship to general nutrition and to thyroid function as well as to the enzymatic breakdown of the complexes and the metabolism of the lipid component may give some light into the circulatory disturbances.

"In the Committee on Chronic Illness of the North Carolina State Society we have been particularly interested in the psychological needs of older people. One individual, an older woman in our State Department of Welfare, has recognized this need and has been singularly effective in meeting the needs of older people. We have observed that geriatric patients often do much better in boarding homes or nursing homes than in a hospital. Of course, we feel ideally they should be in the home of some relative where they can feel needed. I am sure you will have expert opinion in this general field. Similar stress should be placed on the possibility of pointing out in middle age the need of adjustment psychologically to retirement whether or not illness comes on. It is very strange that older people in an environment where they are happy seem to brighten up, become more alert and show fewer evidences of degenerative processes if they are in an environment where they are psychologically well adjusted."

Tuberculosis

In a statement for the Geriatric Committee of Michigan State Medical Society, Floyd M. Feldmann reports the following:

"Tuberculosis is a preventable communicable disease. Of primary importance in prevention is the interruption of the spread of tubercle bacillus. This means case-finding, isolation of the active case, and modern treatment. Fortunately, only a small proportion of persons infected with the tubercle bacillus develops the disease. The reasons for this are complex but, in the opinion of many, such things as nutrition, fatigue, and constitutional factors determine to a large extent which persons will develop active tuberculosis after once being infected and when this will occur. Although tuberculosis attacks all age groups of both sexes, the higher mortality rates are in older men. Paradoxically, this does not mean an increase in risk as people grow older; these high rates in older people represent a residual from the higher infection rates of earlier years and breakdown results from secondary factors rather than from new infections.

"It has been demonstrated that some immunity to tuberculosis can be built up by the use of vaccines, such as BCG, but immunity is far from perfect and of uncertain duration. Most authorities now believe that BCG should be given to those persons most likely to receive repeated infections with the T.B. bacillus.

"With these facts in mind the practical program for the prevention of tuberculosis both in the young and the old should include the following items:

"1. Case-finding procedures to discover the estimated 150,000 active cases in this country not now identified. Periodic examination including chest x-rays in the offices of private physicians, hospital admission x-ray examinations, mass x-ray surveys, and the auxilliary use of tuberculin test are some of the tools now at hand.

"2. Isolation of our 400,000 active cases, coupled with modern treatment to stop the production and to prevent further dissemination of the bacillus. Although treatment in a tuberculosis hospital is preferred, many patients must be treated at home. Drugs and surgery under an individualized long term plan can be of great benefit, but drugs cannot be used in the same manner as for acute diseases.

"3. BCG vaccination for certain groups as recommended by the American Trudeau Society:

(1) doctors, medical students and nurses who are exposed to tuberculosis;
(2) all hospital and laboratory personnel whose work exposes them to contact with bacillus of tuberculosis;
(3) individuals who are unavoidably exposed to infectious tuberculosis in the home;
(4) patients and employes in mental hospitals, prisons, and other custodial institutions in whom the instance of tuberculosis is known to be high;
(5) children and certain adults considered to have inferior resistance and living in communities in which the tuberculosis mortality rate is unusually high.

"4. Emphasis on general measures known to affect the tuberculosis morbidity and mortality:

(1) improvement of housing to reduce crowding and opportunities for the spread of infection;
(2) improvement of nutrition through research, education, and better food production and distribution;
(3) elimination of industrial hazards, such as silica dust;
(4) medical supervision of every person, including periodic chest and x-ray examinations."

Medicine

Harding leRiches, writing for Arthur F. W. Peart, contributes the following:

"In Canada, like in the United States, the diseases of degeneration and of old age are becoming increasingly important. . . .

"The latest figures for Canada, 1951, show the numbers of deaths associated with senescence as a percentage of total deaths as follows:

1. Cardiovascular disease—42.5 per cent.
2. Malignant neoplasms—14.2 per cent.
3. Accidents and deaths by violence—7.4 per cent.
4. Nephritis and nephrosis—2.4 per cent.
5. Diabetes mellitus—1.3 per cent.

"In formulating a research plan for the study of geriatric problems and the diseases of senescence, I feel a great deal could be done in the medical field by utilizing in clinical practice those preventive measures already known to modify those diseases associated with the relentless process of aging. Such educational efforts should commence in the medical schools giving students a good background in clinical preventive medicine. The following are some of the examples of what I mean:

(a) "While the whole story is not known about congenital cardiac deformities, recent work has indicated that prenatal anoxemia or toxemia at a critical period of fetal development may influence the physical development of the heart. The best known example here is German Measles in pregnancy. The role of surgery in correcting congenital deformities is important in a small number of cases. The prevention of subacute bacterial endocarditis in these patients and in those who have already suffered from rheumatic fever is possible in many cases.

(b) "Rheumatic heart disease is the most important cause of valvular disease in childhood and early adulthood. The possibilities in the prevention of this disease should be more effectively brought to the notice of medical students and physicians. Attention to this disease alone will exert a profound influence in reducing cardiovascular disease in all age groups.

(c) "In the field of arteriosclerosis, hypertension, and coronary disease a great deal can be done in the field of prevention, ranging from advice on the proper diet to information on psychological factors in coronary disease and the avoidance of obesity. It is possible that early attention to various types of lung disease could reduce the prevalence of lung fibrosis and subsequent development of our cor pulmonale.

(d) "It is becoming clear that the single most important preventive and therapeutic measures in the prevention of diabetes mellitus and atherosclerosis lie in applied dietetics with due attention to endocrine imbalances. In the field of nutrition a great deal of experimental work should be done not merely on animals but in safe human experiments similar to those carried out some years ago by Professor Ancel Keys. I feel sure that many older people would be quite willing to participate in various nutritional research experiments which could provide a great deal of important information.

(e) "Apart from metabolic disease, accidents, including home accidents are becoming increasingly more important as a cause of death not only in old age but in all stages of life. More detailed studies similar to those carried out by Dr. John Gordon, should be undertaken and each county medical society should itself undertake educational campaigns not only amongst their own members, but in medical schools, nursing schools and among the general public to emphasize those practical steps which may be taken to prevent death and injury by accidents in the home, highway, and the factory.

(f) "We should make a decisive effort to discover whether it will be possible to prevent the diseases commonly associated with old age, leaving behind only the phyisological aging process which will lead to well adjusted happy aging, as far as possible associated with adequate mental adjustment among old people.

"I would like to say that in my view considerable grounds for optimism exist in the field of geriatrics provided all existing knowledge in this field is used to the full in the medical and allied professions. We already have an important tool in our hands to stave off or modify conditions such as diabetes mellitus and certain cases of hypertension. This is in the field of dietetic control. It cannot be sufficiently stressed how many millions of Americans and Canadians are eating themselves into an early grave."

Problems in General

Arnold B. Kurlander and Cletus L. Krag comment as follows:

"We have given some thought to the questions raised in your letter of April 14, 1953, regarding the prevention of disease and senility among the aged. The following statements are some of our views on this most important subject.

"A community approach to this problem of health maintenance in old age may be outlined as follows:

"1. Research and fact finding.

"2. Prevention of disease, disability, and premature death.

"3. *Early and Adequate Care of Illness, Injury, and* disability.

"4. Education

"1. *Research and Fact Finding.*—In order to know just what the health problems of older people are, certain facts must be available. From these facts, control efforts may be directed into appropriate channels. If, for example, it is not known how many untreated diabetic patients or active cases of pulmonary tuberculosis there are in the community, both of which are most prevalent among the aged, then the need for, or the effectiveness of, tuberculosis or diabetic control programs cannot be put on a sound basis. Likewise, without appropriate facts, educational programs may be misdirected or ineffectual.

"2. *Prevention of Disease, Disability, and Premature Death.*—In scope, this encompasses all of the traditional public health activities, in the fields of the environmental sanitation including sewerage disposal, and food, water, and milk control.

"Old people are subject to a number of communicable diseases; and in some respects, they are more susceptible than the young due to lowered resistance and vitality.

"Special efforts are also needed to combat the increasing prevalence among the aged of non-contagious diseases such as cancer, cardiovascular disease, arthritis, diabetes, and mental illness.

"Although most of these cannot be prevented in the same way that typhoid fever can through sewerage and water control, early and proper treatment can nevertheless prevent the further progress of these diseases.

"Accidents are particularly common among the very young and the old. Many of these can be prevented with a consequent decline of disability and premature death.

"3. *Early and Adequate Care of Illness, Injury, and Disability.*—The results of delayed or inadequate treatment of illness, injury and disability during youth will often leave residuals which affect the health when old age is reached. Likewise, inadequate care in old age will also impair the health and function of the mind and body. The need for rehabilitation services for disabilities such as the loss of an arm or leg or paralysis, are just as important to the aged as the young in preventing mental deterioration and dependency upon others for care.

"4. *Education.*—Fundamentally, good health in old age will be determined to a large extent upon what the individual does to maintain good health. It will also, of course, be determined in part by healthful environment and also the facilities available for proper care when sickness, injury, and disability do occur. Education, therefore, becomes an integral and important aspect of prevention of disease and senility among the aged. This is of importance not only in terms of educational programs for the lay public, but also to those who care for the sick, those carrying on public health programs, those directing and carrying on research programs, and those who are responsible for various community and governmental programs having a direct or indirect effect on the health of the people."

Dermatology

A. E. Schiller writes:

"Having been intensively interested in the dermatological approach to geriatric care, I feel that in our particular field the recognition of the following items may result in the retardation of the deterioration now associated with senescence of the skin.

"First, I would like to list the common group conditions that we see in the aging individuals in the order of their importance:

"1. Senile pruritus
   (a) Background probably arteriosclerosis.

"2. Seborrheic and senile keratosis
   (a) Increasing sebaceous activity.
   (b) Growth of epithelial nevi.
   (c) Excessive sunlight exposure

"3. A variety of conditions due to
(a) Circulatory abnormalities.
(b) Nutritional deficiency.
(c) Lack of proper care.

"4. Epitheliomas
(a) Basal cell epithelioma.
(b) Squamous cell epithelioma.

"5. Circulatory Eczema—and leg ulcer.
(a) Not always associated with obvious varicosities.
(b) Low-grade secondary infection.
(c) Sensitization to some therapeutic agent.

. . . I think the following quote will cover a good many points:—'Before the more common dermatoses noted in this group are discussed, it is hardly necessary to emphasize that senile cutaneous changes do not develop at any particular age. The onset of such changes is just as variable as the beginning of senile changes in the ear, eye, joints, and arteries, and the rate of alternation varies greatly in different persons. In the general examination of older patients the physician finds that as the years pass, the subcutaneous fat is lessened and the skin becomes less elastic and thinner and more wrinkling develops; the color may become grayish or yellowish, perhaps with pigmented or de-pigmented areas and there may be a variable amount of dryness and scaling, especially in cold weather. There is also the appearance of gray and white hair as well as thinning and possible entire lack of hair on the vertex in men. In addition, the phyician will find in many older people, hyperpigmented areas, especially on exposed surfaces with varying degrees of pigmentation, including de-pigmentation, small capillary tumors or angiomas, small pedunculated fibromas, small verruca, keratoses, etc., many of which have been present so long or have developed so gradually that they are accepted by the patient as part of the aging process."

Still in the field of dermatology, Paul O. O'Leary has the following to say:

"Under heridity, complexion is of importance. In other words, the sandy-haired, blue-eyed individual with the so-called Chataigne type of skin is prone to serious trouble as he grows old and the trouble is aggravated by exposure to the elements, especially the sun and wind, the frequency with which the keratoses develop, which in turn become malignant. Also, under heredity, are the individuals born to eczema, so-called atopics, members of the so-called allergic groups, in which the eczema is part of the asthma-hayfever-eczema-complex. Also there are the congenital ectodormal defects, usually serious and incapacitating skin diseases. Then, too, the nevi, both vascular and cutaneous, should be included in this group.

"Under the heading, environmental, I would include the weathering effects, namely, the development of keratoses and subsequent epitheliomas in the individuals who have a small amount of pigment in their skin. The lesions of course are not always the result of aging and weathering as in xerodema pigmentosa, the changes come on very early in the child's life. Environmental effects in the production of cancer in the mouth from irritating teeth and tobacco are to be considered, and similarly, the development of carcinomas of the vulva and of the penis as a result of aging changes such as atrophy, kraurosis, and leukoplakia of the vulva and glans penis, must be borne in mind. The weather effects on those who live in the southwest part of the country seem to be more troublesome than those who live in the north. In other words, sun and wind apparently are more troublesome than cold."

Hearing

Says Aram Glorig:

"From the standpoint of the hearing field preventive geriatrics has a very little place, the aging process on hearing is one about which very little can be done similar to the aging process on the eye.

"Hearing loss due to age is a high frequency loss and therefore doe not affect the speech range in the average case until ages over seventy to seventy-five are reached and this is not usual.

"We know so little about the inner ear and its physiology, it would be hard to propose any method which would be applicable to preventive geriatrics. The greatest effect on the function of hearing in older people is that which occurs to the auditory-cortical areas rather than to the ear itself, and this is the effect of general mental aging. This problem sums up to be one which is centered more in the use of general measures which could benefit the individual as a whole rather than in procedures directed especially at the ear. There is probably one exception to this: this is the deafness which is produced by exposure to excessive noise. It is definitely known that individuals who work for long periods of time in excessive noise do become deaf and naturally this deafness is increased with age because of the very nature of the individual's employment. This problem is being adequately studied by the American Academy of Ophthalmology and Otolaryngology through the Committee on Conservation of Hearing."

Ophthalmology

In the field of ophthalmology, Franklin M. Foote has the following to offer:

"We are very much interested in eye problems of middle age and older people. Suggestions about the postponement of senescence as related to eye conditions in this group are only theoretical at the present time. These would include suggestions as to improve nutrition, avoidance of infection, and similar measures which would improve general health and prevent general senescence. There seems to be no sound scientific information that good lighting or that avoidance of close work would prevent or reduce organic eye disease.

"However, one measure that there seems to be good evidence for, is the recommendation of a thorough professional eye examination at least once every two years after the age of forty. It is after this age that blinding eye diseases such as glaucoma, uveitis, and many other conditions, are most common. Many of these conditions are insidious in that they produce no sign or symptoms of trouble in the early stages, and these symptoms do not become great enough to bring the patient to the oculist until the condition is pretty well advanced. However, a careful eye examination can discover these conditions in the early stages and many such diseases which cause loss of vision can be best treated if found early. This is particularly true of glaucoma and uveitis.

"Because of geographic circumstances or other reasons, it may not be possible for every person to obtain an ophthalmological examination every two years. In such cases, we recommend that such persons be examined by his own family physician and that his examination include a Snellen test for visual acuity and ophthalmoscopic eye examination. Some general physicians are also taking the tension using a tonometer."

Derrick Vail writes:

"I am very much interested in the study that you are conducting on geriatrics. As a practicing ophthalmologist, many of my patients, as you know, are elderly people, suffering from ocular diseases.

"I have very little to suggest in the solving of the

problem of aging, so far as the eyes are concerned. As you know, they share in the entire aging process and the prolongation of life has resulted in many serious ocular disturbances, such as senile macular degeneration, associated with sclerosis of the choroidal vessel, combination of vascular hypertension. Arteriolosclerosis, with and without diabetes, also is one of our thorny, ocular problems which we are seeing much more commonly now that the people are growing older. Cataract is a disease of senescence in most cases. Glaucoma has some association, but all of these ocular problems are essentially tied in with what is going on in the body as a whole, and we are back where we started from. The early recognition of glaucoma and proper treatment is, of course, essential to the saving of eyesight, but even in cases where the tension has become normalized by surgical or medical treatment, frequently visual deterioration continues, due to sclerosis of the nutrient vessels of the optic nerve. So far as I know, cataract removal of it nowadays presents very little difficulty, cannot be prevented or treated medically. Surgically even in the very aged. The oldest person I operated on for cataract was a doctor of 101. This was successful, and the patient lived two years.

"As I see it, the problem is essentially that of proper blood supply and nutrition. I believe that work should be continued along investigation of this phase of the subject."

A. D. Ruedemann offers the following:

"The problem of geriatrics is one that confronts us and must be considered at all times in ophthalmology. With our late vascularity diseases of the retina and the senile type cateracts and with other conditions such as entropion and ectropion of the lids, it becomes an important subject with us.

"I think first and foremost would be the prevention of cateracts which would appear to be a deficiency disease, primarly on a dietary basis, over a long period of time. Secondly, it would be a low degree of endocrine disturbance such as we see coming on at the climacteric and I think when both of these main problems are well controlled that senile cataract is definitely deferred.

"The vascular diseases are within the realm of the general medical man but an entropion and ectropion are due to relaxation of the lid or irritation of the lid and again, are on a long standing chronic basis. Finally, we must not forget that presbyopia comes to everyone who lives beyond the age of 40. So geriatrics is as you can see a prime disease among the eye men."

General Considerations

W. C. Hueper states:

"Faced with a rising proportion of elderly patients, physicians will be called upon to diagnose and differentiate to an increasing degree between the pathologic and physiologic manifestations of old age and the various factors that cause biologic aging. An effective prevention, mitigation and, possibly, partial reversal of the senescent processes surely will depend upon a clearer and more comprehensive understanding of the causative factors and their action mechanism. A greatly improved control of senescing changing is not only desirable as a means of lengthening the useful and enjoyable period of life, but, under the existing sociologic and economic conditions, may become an urgent necessity. Our present socio-economic pattern is ill adapted for taking care of the incapacitated senescent individual within the circle of the family. The great majority of elderly persons depends totally or partially upon public support. It is therefore in the general interest to maintain the older individuals in as good a physical and mental condition as possible so as to keep them economically self sustaining.

"There exists moreover definite prospect that reliable and exact information on physiologic and pathologic aging and the availability of a 'biologic age rating' might prove to be of distinct value in determining future policies as to the so-called retirement age. It is quite obvious that the present widespread practice of enforced retirement at a certain chronologic age without regard to the relative biologic age of the individual is neither wise from the human standpoint nor economical from a sociologic viewpoint. It is a system that is bound to squander carelessly a great deal of painfully acquired and very valuable professional experience and human wisdom. It should prove to be much more rational, practical and humane to base the time of retirement and/or reduced professional activity on the relative biologic age of the individual.

"Although the average life span of man has been lengthened considerably through an increasingly successful control of diseases, there is little evidence that this development has been accompanied by a lengthening of the absolute life span. It appears therefore that the physiologic and/or pathologic factors that control the so-called 'aging' processes have not appreciably been changed by the suppression of health hazard related mainly to communicable diseases. The shift in average life span is chiefly the result of a reduction of deaths associated with infectious diseases occurring during childhood and early adult life and a corresponding increase of deaths of elderly individuals from 'degenerative' diseases, such as arteriosclerosis, hypertension, cancer, chronic nephritis, and diabetes. Thus, at least a part of the problem of aging seems to depend upon a better control and understanding of the factors that cause these 'degenerative' diseases which are the most prominent causes of disability and death during the late adult and senescent period of life.

"However, even if such efforts should be effective, they probably would result in merely lengthening the average life span without appreciably influencing the absolute life span, or removing entirely the incapacitations associated with growing old. To be successful in the latter it is essential to acquire a great deal more fundamental facts as to the factors responsible for the physiologic aging of tissues, organs, and whole organisms than we possess at present. Biologic aging, in contrast to chronologic aging, designating a mere time relation, is the result of the action of physiologic and pathologic factors which may accelerate, modify or delay the normal senescing processes that affect the tissues and modify their function from the prenatal period to death. Constitution and environment, therefore, determine the biologic age of an individual in relation to his chronologic age. He may be young, normal or old for his 'age.' Moreover, the aging process may not, and usually does not, affect uniformly the entire organism but some tissues or organs may age faster than others (disharmonic aging). Typical examples of this fact are represented by the earlier arrest of function and atrophy of the placenta, the thymus, and the female sex organs. Physiologic aging seems to be determined by the balance of pro-aging (progeric) and antiaging (antigeric) factors. This process furthermore can be modified and complicated by pathologic factors (infectious diseases, dietary deficiencies, poisonings, climate, occupation) which not only act upon the physiologic aging factors but which may add new, abnormal features to the physiologic aging process.

"The existing knowledge on the various manifestations of biologic aging is much too defective to permit an expression of the relative biologic age of an individual in concrete and precise terms ('biologic age score'). Such judgments usually take at present the form of mere comparative impression, such as 'she looks ten years younger than her age'; or 'he appears to be fifteen years older than his actual age.' It is obvious that such a procedure is not only very crude but also rather unreliable, arbitrary and often meaningless. There exists, therefore, an urgent need for extensive and detailed

studies of the factors that control physiologic and pathologic aging processes and for establishing definite and distinctive criteria of physiologic and pathologic aging, as it may become manifest in functional, physical, chemical, and morphologic reactions of tissue, tissue fluids, intercellular substances, blood, lymph, organs and the organism.

"It is not likely that every sharp line of demarcation can be drawn between physiologic and pathologic age factors, since some aging factors are of ambivalent character. Nevertheless there is a basic necessity for determining criteria of phviologic aging and the factors responsible for this process. Only when this baseline has been ascertained, is there a possibility of etablishing criteria of pathologic aging, and of discovering the nature and effects of pathologic age factors."

Since cancer is one of the major diseases associated with the aging group, Charles S. Cameron suggests in the field of prevention those measures offered in the Technical Statement of the Preventive Aspects of Cancer prepared by the National Cancer Institute and the American Cancer Society for the National Conference on Chronic Disease. The measures follow:

"1. Prevention of future contamination of the human environment by known or suspected physical and chemical cancerigenic agents and institution of all possible preventive, protective and prophylactic measures in all plants, workshops, laboratories, mines and mills where carcinogenic agents are produced, handled, or used.

"2. Educational campaign among members of the medical profession, public health officials, industrial hygienists, and other interesting parties to become increasingly aware of the existence and nature of environmental cancerigens and to become interested through increased alertness in the discovery and prevention of human cancers with known or suspected causation.

"3. Organization of systematic and extensive studies on cancer epidemiology and etiology on the basis of the entire country, individual states, regions, industries and occupational groups.

"4. Development of improved and rapid methods for screening exogenous and endogenous environmental agents for cancerigenic properties.

"5. Development of etiology specific diagnostic tests."

It is a frequent clinical observation that when an individual retires, there is frequently a rapid superimposition of organic disease upon the senescent individual. The exact reasoning for this has always been a mystery to me, but there undoubtedly is some relationship between the emotional state and the subsequent organic disease. If this mechanism were discovered, we would have some means of preparing an individual for retirement and thus help prevent this rapid increase of senescence and development of organic disease. This would be one positive approach of preventative geriatrics. (JRB)

In our efforts to prevent some of the problems of the elderly individual, we must point out to our patients during middle life, how important it is for them to begin preparation for their later years long before they arrive. We make plans for almost everything else we do, so why should we neglect to give consideration to the last twenty years of our life which should be enjoyable and leisurely spent doing some of the things we did not have time to do in the years before. (AHP)

First, it is self evident to most of us, that we must so regulate our finances that we will have enough left to provide us with all of the worldly goods that is necessary for our happiness. This amount will vary with almost every individual according to how he has been accustomed to living in his younger years, but he should also learn to scale down his standard of living according to his resources. The value of a dollar at one period in life may change a great deal from that of another, and this must be taken into account when planning our financial status. Economic insecurity is still without doubt the number one problem of our aging population and must be corrected before there can be peace of mind for those at retirement age. Employer and employe must together work out a more satisfactory plan than is at present in vogue. (AHP)

While it is important that the male member of the family provide the major part of the financial income, it is of paramount importance that his wife so prepare herself during her school years with some type of training which will enable her to assume the earning role, should it become necessary. A training in typing, bookkeeping, secretarial work, teaching, nursing, millinery, cooking or any one of several other vocations would prove invaluable if her husband became incapacitated or died. Too often girls graduate from a finishing school or liberal arts college with a good general education, but no specific knowledge of anything. This may prove to be a severe handicap, creating at times a state of frustration and many psychosomatic illnesses. (AHP)

While the need of careful preparation for our economic problems is of great importance, the necessity of developing a broad horizon of interest should also command our careful attention. We spend most of our time during early and middle life concentrating upon what we call our life's work, and are apt to neglect the development of other interests or avocations which become increasingly important as we grow older. Many of us worked all day at the office or shop, went home, read the paper and then to bed. We never seemed to find time for anything else. Unless these interests are gradually created over the years, we are apt to find ourselves at the stage of retirement with nothing to do, nothing to think about, bored with living and generally very unhappy. By contrast, think of the person who never wanted for something to do every evening. He liked gardening and enjoyed everything nature had to offer in the out of doors or he enjoyed sports of all kinds, played golf, bowled or was interested in working with boys or girls and their problems. He enjoyed working with tools and making fine furniture and metal pieces, liked to look at the stars and became an amateur astronomer. Some of us have lots of

initiative and need no prodding from ourselves or anyone else to develop any one of many interests. Some of us, however, need to realize our shortcoming in this regard and must, by aptitude test or just plain analysis of our likes and dislikes, work at the problem, going to school if necessary, in order to develop some avocation which will serve us well in our later years. (AHP)

It is our duty as physicians to point out these facts to our patients so that as they grow older, they will be preparing themselves for the last years of their life, a time when they should be happy and contented. They can best have this contentment by keeping their minds active, thinking of things worthwhile, and doing something that is constructive and helpful for someone else besides themselves. None of these things just happen, they result from careful consideration and preparation over many years' time. (AHP)

Old age is inevitable. Its infirmities are not. Of necessity, the declining years are all too often ones of marked decrease in physical and mental power frequently to the point of complete incapacity. Degenerative disease, starting at any time from early middle life, progresses with increasing frequency and severity as age advances. By degenerative disease is meant the vascular changes due to atheromatous deposits, the neoplasia that is most often an occurrence in later years, and the decline in physical activity, and drive which is the result of endocrine involution. In addition to these, the individual past fifty is heir to many of the ills befalling younger people: acute infections, chronic debilitating illnesses as exemplified by tuberculosis and the granulomata, leukemias and other blood dyscrasias, the collagen diseases, trauma and the host of pathological changes which can occur. (LFS)

It would seem that a logical approach to these kown facts is first, a healthy attitude on the part of the family, public and practitioner. Any one of these previously mentioned conditions merits an attempt to definitive therapy. In fact, many oldsters are less severly afflicted by disease than their younger counterparts. This is often true in diabetes. Also, neoplasms may take a slower and more benign course. It is amazing and often extremely satisfying to note that disease can be ameliorated in the old patient. Surgery, radiation, specific or palliative medication is just as much indicated at age eighty as age thirty and negative thinking is to be decried. (LFS)

In industry, a place should be found for those individuals able and wanting work. It is completely ridiculous and frequently a wanton waste of superb abilities to retire a person at a stated age as is so often done. Many people are old at forty and others young in actions and thought at seventy. Chronological age is often at great variance with physiological age and its potentials. (LFS)

I would recommend on optimistic attitude toward the aged person in both health and disease, with an opportunity for gainful employment as long as he is able to honestly produce results. (LFS)

Summary

The following material is based almost completely on the letters of the Discussants already mentioned in the text of the paper and especially including the suggestions appearing in the letters of Clarence I. Owen, F. L. Rector, Mac Roy Gasque, and David Seegal.

1. The contribution of heredity is very definite. The exact amount is a debatable issue. A promising future from an hereditary standpoint may be cut short by an auto accident. Less promising stock may be spared the more deleterious environmental effects and set a record for longevity.
2. The aging process begins with conception.
3. The effects of time on protoplasm may not be as momentous as usually thought.
4. The environmental stimuli (both internal and external) probably contribute most of the effects now attributed to the passage of time (aging).
5. The effort to add more life to living and more living to life must be begun at birth and continued throughout life;

(a) The adoption of those hereditary principles that can best be utilized by our present type of civilizations.
(b) First rate obstetrical care.
(c) Enlightened pediatric attention.
(d) The adoption of a unified interdisciplinary education and health program on a long range basis designed to promote the best interest of the individual and the community.
(e) Yearly physical screenings and if necessary physical examinations.
(f) Continued application of all the concepts of preventive medicine for the protection of the individual and the community.
(g) The following probably should be included under "(f)" but it received so much attention by most of the Discussants that it is being mentioned separately. "Avoid overeating and obesity."
(h) Careful study of dietary habits and vitamin requirements and intake.
(i) Since it is not possible for the human race to live like the cells of Carrel's tissue culture, spared of all environmental effects except the favorable ones, all should be as Hans Selye says in the dedication of the volume Stress . . . "Not, be cured of my stress but merely taught to enjoy it."
(j) Provide for all the opportunity for continuous productive employment throughout life. Voluntary retirement the only type recommended.
(k) Education for broader interests than just the bread and butter kind. This might well

include what some people chose to call a hobby. The physical and mental horizons of youth must be preserved by regular daily physical exercise and mental gymnastics.

6. "The socio-economic aspects are equally important and I feel," says Mac Roy Gasque, "that it is high time that the physicians recognize their privilege, even their obligation, to take the lead in shaping the matter of things to come." Some of the personal obligation the physician feels for his individual patient must be shared with the community for the solution of its problems.

7. Some effort should be made to better define both physiologic and chronologic aging.

8. The forces of medicine and the allied sciences should now be directed against the so-called chronic degenerative diseases of man.

9. Physical medicine and rehabilitation offer some definitely new and important concepts in the handling of this problem of aging.

10. Some solutions for the economic problems of the aged must be sought.

11. Preservation of family and friendly ties are a bulwark against loneliness.

12. Idleness is not only wasteful but contributes to biologic parasitism and degeneration of human society.

13. The mental and physical vigor of our present aged group probably is much better than a similar group of a few years back.

14. "A *modulation* program could be instituted in industry and occupations where a subtle of man's work in keeping with his altering physical power is indicated."

15. Some thought must be given to the housing plans of the future to make accommodations for the older inhabitants.

16. The establishment of geriatric clinics will probably be an answer to some of the health problems of the aging.

17. A good life can be built and senescence deferred by an upbringing in the home that emphasizes healthful living, good sportsmanship, community service, good citizenship, tolerance, industry and good money management.

18. The physician will have to learn new facts and assume a new attitude toward his older clientele.

19. The trend of the thinking of the Discussants and the Committee was very similar. Preventive Geriatrics as elaborated and as a working concept may "catch on." It will in general include all those measures that go to produce an excellent product and to assure its good care until that inevitable day when like "The Wonderful One-Hoss Shay" everything will fall apart.

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MSMS and the Salk Vaccine Experiment

IN 1953, the MSMS first considered the plans for the Salk poliomyelitis vaccine experiment, as proposed originally for twelve Michigan counties by the National Foundation for Infantile Paralysis. Various committees of the Sociey, and members of The Council as individuals, were instructed to seek information from independent sources regarding the Salk vaccine. Careful consideration of the problems attendant upon the experiment continued through the early part of 1954.

So great was the interest of MSMS that Jonas E. Salk, M.D., who developed the vaccine, was invited to speak at the 1954 Michigan Clinical Institute, as the Michigan Foundation for Medical and Health Education lecturer. Dr. Salk, however, was unable to accept.

Following is a chronology of events up to the publication date of the May number of THE JOURNAL, as the final position of MSMS developed:

March 12—In a meeting of the Executive Committee of The Council in Detroit, at which the State Health Commissioner was present, it became mutually apparent that neither the Commissioner nor the Executive Committee had the answers to three very important questions, namely:

1. What responsible authorities have certified or will certify the safety of the use of the vaccine and the control substance?

2. What reliable proof is available that the vaccine will not sensitize rather than immunize the children receiving it?

3. Who will assume legal and moral reponsibility for possible untoward results from the use of the vaccine?

These questions were phrased technically by the State Health Commissioner and agreed to by the Executive Committee. MSMS and the State Health Commissioner decided to seek satisfactory answers in writing from authoritative sources, particularly the Biologics Control Laboratory of the National Institutes of Health, United States Public Health Service, and the National Foundation for Infantile Paralysis.

April 1—In a meeting of the Executive Committee at Utica, it was reported the MSMS had not yet received satisfactory answers to its questions. The State Health Commissioner, who was present, indicated that he still shared the doubts which were in the minds of Executive Committee members, and stated that he hoped to have the answers to these questions for a meeting which he was calling at his office on April 14.

A motion was adopted stating that "The Executive Committee of The Council cannot recommend the use of the Salk vaccine for infantile paralysis until we have further assurance of its safety and that it will not in any way damage our children in the immediate or foreseeable future." A statement explaining this position, and supporting material, was drafted and approved by the Executive Committee for prompt distribution to component county medical societies in a Secretary's Letter.

April 2—MSMS wrote the State Health Commissioner formally stating that "MSMS can neither approve nor disapprove the proposed experiment, and must advise component county medical societies accordingly." Meanwhile preparations for the inoculation of several thousand Michigan school children had proceeded under the stimulus of the National Foundation for Infantile Paralysis.

April 3—A Secretary's Letter was mailed to the presidents and secretaries of all county medical societies stating the above three questions and pointing out that satisfactory answers had not been received from authortitative sources. A news release outlining these facts was prepared for distribution Monday, April 5.

April 4—In a nationwide telecast-broadcast a well known news commentator made a sensational statement concerning Salk vaccine, which, unfortunately, was confused with the MSMS position.

April 5—News release outlining the MSMS position was distributed to newspapers, radio stations and news services. This stated that "MSMS cannot recommend the use of Salk vaccine—until we have further assurance of its safety." In this release the MSMS Secretary stated: "The MSMS will be the first to endorse a vaccine demonstrated to be safe and effective against poliomyelitis."

April 14—At a meeting of county health officers, county medical society representatives, members of the State Health Commissioner's advisory committee on the vaccine field trials and representatives of

the National Foundation for Infantile Paralysis summoned by the State Health Commissioner, the experiment and the questions asked by MSMS were discussed. Additional questions dealing with the over-all safety of the vaccine as posed by MSMS following the April 1 Executive Committee meeting also were taken up. At the close of the meeting the State Health Commissioner framed a letter to MSMS stating in part: "At an executive session of the medical doctors present, the group expressed itself that all questions raised had been answered reasonably and satisfactorily. After discussion, it was moved, supported, and carried that the doctors of medicine present recommend that the Michigan State Medical Society take favorable action and immediately approve the proposed polio field trials in Michigan."

The Commissioner did not state his position in this letter.

April 15—MSMS received the April 14 letter of the State Health Commissioner. This letter declared that the Special Advisory Committee on Active Immunization of the National Foundation for Infantile Paralysis would certify the safety and potency of the vaccine to be used in the field trials, after reviewing the protocols for each lot submitted by the manufacturer and three testing laboratories. This letter also stated that the National Foundation, as owner of the vaccine, carried insurance indemnification for itself, and that the doctor of medicine administering the vaccine (who had no control over the experimental materials involved) already carried "malpractice insurance . . . adequate to cover the ordinary unavoidable accidents such as broken needles, et cetera." Accompanying the Health Commissioner's letter was a file of correspondence and information documenting the reply.

Among this supporting correspondence was a letter from Leonard A. Scheele, M.D., Surgeon General of the United States Public Health Service to the State Health Commissioner, stating in part that the role played by the National Institute of Health "does not justify the Public Health Service in making an 'unqualified statement' with respect to the vaccine". Dr. Scheele further stated: "The vaccine is an experimental product whose manufacture has not been licensed. Information which would be required for the issuance of a license is not yet available and is dependent on further laboratory and clinical experience."

April 16—Copies of the Health Commissioner's letter of April 14, along with the supporting documents, were mailed to members of the Executive Committee of The Council. The Chairman of The Council sent a telegram to all members of the Executive Committee, asking them to telegraph by Monday, April 19, their recommendations on whether MSMS should approve, approve with reservations, or disapprove (the) mass inoculation project".

April 19—In a statewide telecast reaching those counties scheduled to participate in the field trials, the Chairman of The Council spoke directly to the people of Michigan, outlining the MSMS decision as determined by the poll of the Executive Committee. He stated that MSMS would "not withhold approval from the experiment" and would defer to the decision of the State Health Commissioner. He emphasized, however, that the undertaking: (1) must be recognized as "mass inoculation of selected children as part of a scientific experiment" and not "mass immunization"; (2) should not by-pass the prerogative of the family physician to determine what type of, or when, preventive inoculation should be administered to a child under his care, and (3) should provide for access to vaccination records by family physicians of children involved in the test. He also invited attention to the timing of the experiment pointing out that it might collide with the onset of the poliomyelitis season; however, timing was held to be within the domain of public health officials for decision. Since the last telegram in the poll of Executive Committee members was not received until shortly before broadcast time, the final wording of the MSMS position could not be prepared in time for the telecast.

April 22—MSMS presented its final position in a letter to the State Health Commissioner. In a covering letter accompanying this decision, the Chairman of The Council explained: "The reservations set forth have been made necessary because the answers of your advisory committee to questions put by the Michigan State Medical Society, while reassuring, are not *fully* satisfactory to us. Without these reservations the individual doctor of medicine becomes responsible for the safety of experimental materials over which he has no control."

The final decision of MSMS, directed to the

(Continued on Page 558)

Handmaiden to Maternal Assassins

By Norman F. Miller, M.D.
Ann Arbor, Michigan

A HALF century ago, and again a quarter century ago, the maternal mortality figures from many nations revealed the embarrassing fact that the United States of America was by no means the safest place in which to have a baby. With reluctance, we had to admit that something was wrong. Our care of potential mothers was not what it should be. The epoch-making events that transpired during the intervening years constitute golden chapters in obstetric history. Partly because the spotlight of inquiry was focused upon obstetrics, and, even more, because of a gradual improvement in understanding, better obstetric education for patients, for medical students and physicians, improved facilities, antibiotics, availability of blood and many other reasons, the risks incident to pregnancy and childbirth have undergone a tremendous decline. While available statistical evaluations are notoriously inaccurate they do serve to indicate the trend. Thus, from the fantastic figures of 1903, the maternal mortality in the United States dropped to less than one (0.9) per 1,000 live births in 1951. This decline was the result of nationwide improvement and it is impressive. It is both gratifying and relaxing to know that for the wives, daughters and granddaughters of today having a baby is a much safer business.

We find comfort in this knowledge, and rightly so, but there can be no resting on oars. Letting down now could lead us into the medical doldrums, a static state of dry rot, where we fall for the philosophy of irreducible minimums. Indeed, the thought that maternal mortality has approached this eutopian status has been incubating for some time. A survey in the State of Minnesota revealed a death rate for 1941 of 2.0 per 1,000 live births. At that time the hope was expressed by the survey committee that it might be possible in ten years to reduce Minnesota's maternal mortality to 1.0 per 1,000 live births, *then considered the irreducible minimum.* Five years later, in 1947, Minnesota's rate was 0.6, the lowest in the United States for that year. In 1951 the rate for Minnesota was reduced to 0.3 per 1,000 live births and Minnesotans do not accept this as "an irreducible minimum." Nor should they do so, for in the same year both Connecticut and Oregon (in 1951) reported rates of 0.1 per 1,000 live births, in other words one maternal death per 10,000 live births.† In 1951 Michigan reported a rate of 0.54 and the rate of the whole U.S.A. was 0.76 per 1,000 live births.*

Reduction in maternal mortality did not occur suddenly. It represents a progressive decline over a long span of years and the goal has not yet been reached.

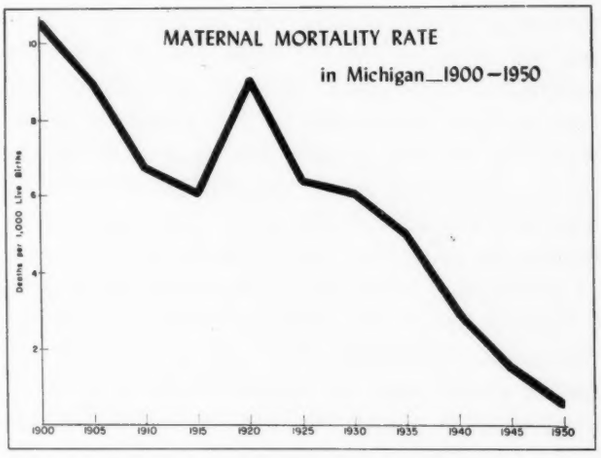

Fig. 1.

In our own State of Michigan the decline in maternal mortality has also been impressive. This is emphatically shown in Figure 1, taken from a report on Maternal, Infant and Childhood Mortality for 1950 prepared by the Maternal and Child Health Section of the Michigan Department of Health. In 1900, Michigan had a population of approximately 2,500,000 and 43,699 live births. During the same year there occurred over 450 maternal deaths, an incidence of 10.4 per 1,000 live births.** By 1952 Michigan had a

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Presented at the Fourth Annual Lecture Program of the Clara Elizabeth Fund, Flint, Michigan, October 7, 1953.

†Minnesota Maternal Mortality Surveys by A. B. Rosenfield, M.D., M.P.H., Director, Division of Maternal and Child Health, Minnesota State Department of Health, Minneapolis, presented before the Maternal and Child Health Section of the American Public Health Association, Cleveland, Ohio, October 23, 1952.

*Data obtained from the Maternal and Child Health Section, Michigan Department of Health, Lansing.

**A book of charts on Maternal, Infant and Childhood Mortality, Michigan, 1950. Maternal and Child Health Section, Michigan Department of Health, Lansing.

population of almost 7,000,000 and nearly 180,000 live births.* There were "recorded" only eighty-two maternal deaths for that year, an incidence of 0.5 per 1,000 live births. Although this incidence is not quite correct, being lower than the facts will ultimately reveal, it, none-the-less, represents a tremendous decline in the risk of becoming a mother. In Michigan, over a period of fifty years the actual number of maternal deaths decreased from 452 in 1900 to approximately eighty-two in 1952. This despite the fact that there were over four times as many births in 1952. What better evidence of improved maternal care could one wish for? Progress indeed! But, paradoxically as it may seem, it is still recorded both in terms of lives saved and tombstones. This fact must be remembered, for we are not entitled to rest on the laurels of our predecessors. It is not my wish to detract from, or to minimize progress already made. I have no wish to disturb medical conscience or lay peace of mind. But, I do ask you to open your eyes to the tombstone side of this story. Careful examination of this less publicized cobwebby side shows that despite the recorded cause of death, be it toxemia or hemorrhage, there was generally another silent partner in on the kill. Though seldom evaluated, this evasive, double-dealing interloper frequently spelled death when the thread of life was weakened by other causes. Familiar to us all, but seldom recognized, this maternal assassin is the one most amenable to medical control. We must recognize and expose this seldom named arch enemy which is commonly garbed in the form of "too little too late," "poor judgment" or just plain "incompetence." In any form this handmaiden is a dangerous killer.

At the turn of the present century maternal deaths were attributed principally to (1) infection, (2) toxemia, and (3) hemorrhage. Throughout the years these causes have retained their unenviable reputation, although today hemorrhage heads the list, with toxemia playing second role. Infection, the one time leader, has been demoted in rank, thanks to asepsis, antibiotics and many other reasons.

Toxemia remains an enigma despite worldwide research. In Michigan toxemia is responsible for approximately 20 per cent of maternal deaths. The chief cause is hemorrhage. In one form or another excessive blood loss underlies or is directly responsible for over 40 per cent of maternal deaths.‡ Other important causes, especially embolic phenomena and infection, should be prominently listed, yet none—no not one—is more deserving of our attention than this handmaiden to maternal assassins—whatever its guise may be.

Because it plays an important role I should like to discuss it, and in doing so I am not unmindful of the difficulties involved. Statistical evaluation of maternal deaths are inaccurate and do not always give us the true cause. How can it be otherwise? Away from the immediate environment of emotional stress, far from the tense atmosphere of the fatal complication, it is sometimes difficult to rightly assay the death dealing factors. Such things as the availability of help, the quality of environmental facilities, individual capability and obstetrical judgment are but a few of the intangibles—threads by which life is suspended in the presence of serious complications. These make difficult the task of weighing procrastination, faulty judgment and incompetence as factors in maternal mortality, but, they must not blind us to their shadowy presence.

Attempts to catalogue the causes of maternal death have been going on for a long time. The incompleteness and inaccuracies inherent in reports based on such data are well known and are difficult to avoid. As a consequence few maternal mortality reports are complete and still fewer attempt to evaluate preventability. In 1933, a noteworthy exception appeared in the form of a report by the New York Academy of Medicine on Maternal Mortality in New York City.† The New York report was based on 2,041 maternal deaths occurring during the years 1930-1932. Two-thirds (1,343) or 68 per cent, for one reason or another, were considered preventable. Of this number, 60 per cent "could have been avoided" and were attributed to incapacity of the attendant; lack of judgment, lack of skill or careless inattention. This report is now twenty years old. Many changes have occurred since it was prepared, but faults of omission and commission are still with us. One need only take a look at the tombstone side of the story as told by two of the major killers, toxemia and hemorrhage, to confirm this fact.

The mystery disease of obstetrics—toxemia—is

*See footnote on Page 539.

‡Estimates based on maternal deaths in Michigan for years 1950, 1951 and 1952.

†Maternal Mortality in New York City. The Commonwealth Fund. New York: Oxford Press, 1933.

responsible for about one-fifth of the maternal deaths in this state. Probably sixty per cent of these toxemia deaths are preventable. In 32 per cent, the responsibility appears to have been that of the patient and her family (failure of co-operation). In the other 68 per cent the responsibility appears to be on the medical side of the ledger.‡ Most physicians are alert to the hazards associated with toxemia. However, some appear to underestimate the seriousness of these diseases. How else can we account for the obvious part played by the "handmaiden" in fatal cases. The toxemia death records include many examples of points I wish to make, namely:

1. Major maternal assassins seldom strike alone.
2. The handmaiden—here discussed—is commonly the straw that breaks the camel's back.
3. Some maternal deaths are preventable.
4. We can do something about it.

The latest national figures show that mortality from toxemia decreased approximately 71 per cent during the ten-year period 1939-1949.§ In Michigan, during the ten-year period 1940-1950, the death rate from this cause decreased only 50 per cent. This improvement is good and may tend to blind us to the fact that many women still die from toxemia and unnecessarily so. In searching for the reason it appears that unfamiliarity with basic principles of management continues to be an important factor. These cardinal principles are important enough to warrant their simple restatement at this time.

The normal pregnant woman does not reveal sudden gain in weight (edema), albuminuria, or hypertension. Consequently the presence of one of these signs calls for more frequent prenatal visits. The presence of any two of these signs means the patient is in danger and must be carefully observed. The presence of all three signs is like a siren urgently calling for action. A patient so afflicted must be hospitalized for rest, study and treatment. A good response may warrant discharge in a few days under close scrutiny. A poor response, as evidenced by progressive increase in the severity of her signs and symptoms calls for consultation and, in many instances, termination of gestation. These things are about as axiomatic in the practice of obstetrics as is pressure on the brake when stopping a car. Yet, despite these basic principles, women die because these axioms are ignored. A composite example might go somewhat as follows:

> A thirty-year-old married gravida III, para II white woman reported for care early in pregnancy. Her height was 5 feet, 6 inches, weight 140 pounds, blood pressure 110/80 and urine negative on this first of nine prenatal visits. At the sixth month of gestation her blood pressure rose to 150/90. From this time on each urinalysis was positive for albumin. By the seventh month of gestation the patient was edematous, her weight being 163 pounds, blood pressure 170/90 and the urine four plus for albumin. Despite these urgent and alarming signs, no definitive action was taken until one month later when the patient developed convulsive seizures and was admitted to the hospital. Now, much too late, labor was induced and after eight hours of desultory contractions, delivery of a dead infant was accomplished by version and extraction, following which the patient went into deep shock and died. Result—a dead infant, a dead mother, a broken home—all charged to toxemia of pregnancy.

In this case the handmaiden had a veritable field day. Disguised in such costumes as procrastination, poor judgment and too little too late, it played a stellar role in the death of this woman and her child.

The defects in the management of this case are so obvious as to require no comment.

If the use of this "composite" example disturbs you, let me hasten to say that the death records contain equally "unlikely" reports. To burden you with their recitation would serve only the useful purpose of reiteration, for they illustrate the same common errors, namely:

1. Failure to take seriously the early signs and symptoms of this highly volatile disease.

2. Failure to recognize that our strongest weapon in combating toxemia during pregnancy *still* lies in early recognition and, when unresponsive to treatment, in termination of pregnancy BEFORE the situation has become untenable.

A few moments ago, I stated that the unresponsive toxemia may require termination of pregnancy. It is not possible to discuss this in detail at this time but it is too important to be completely dropped. The choice of time and method for termination is often a vital matter. Consequently, it is well to have considered this eventuality long before the need arises. It is well to keep in mind the following points:

1. Patients must be individualized since much depends on the duration of gestation, parity, condition of the cervix, position and size of the infant and rapidity with which the disease is progressing.

2. Don't wait too long. Don't delay interruption until haste becomes another hazard jeopardizing the lives of both mother and child.

§U. S. Children's Bureau, Statistical Series, Number 15.

3. When the above precautions are observed cesarean section is seldom necessary but, should good judgment point to section as the proper method for a given case, then do not hesitate. Let neither talk about conservatism nor chatter about section incidence interfere. Properly indicated, a well-timed section may be the most conservative method of termination. Furthermore, a toxic patient who fails to respond to treatment is in danger of losing her life. We would not hesitate to recommend laparotomy for a suspected acute appendix. Why, under such urgent circumstances, should we hesitate to perform a properly indicated laparotomy for fulminating toxemia? Patients are just as dead from fatal toxemia as from a ruptured appendix.

It would be incorrect to leave the impression that the "handmaiden" accompanies only the toxemias. This boon companion to all major killers appears to achieve its greatest success in teaming up with hemorrhage. Over 60 per cent of maternal deaths due to hemorrhage are probably preventable. If we eliminate ectopic deaths the preventability rises to over 70 per cent.[4] As stated earlier preventability and the parts played by delay, faulty judgment, environmental shortcomings, et cetera, are sometimes difficult to evaluate. Appraisal must be undertaken with care. It is best done by those with knowledge of the innumerable factors, stresses and strains which influence the outcome of any emergency.

While management of toxemia is largely an individual physician's matter the control of hemorrhage depends also upon the facilities offered by hospitals. But, in last analysis the availability of equipment and facilities are determined by the planning of the physicians themselves, so even this remains our responsibility.

Because hemorrhage commonly strikes suddenly, its management can be an especially serious problem. Who amongst us—at some time or another—has not felt the cold, spine tingling chill of death as he struggled to stem the flow of life essential blood? Who amongst us after such experience has not resolved to be better prepared for the next similar emergency? Yet, despite good intentions, despite the high incidence of hospital deliveries, the greater availability of blood and blood substitutes, women continue to die unnecessarily from this cause. This is today, the most common reason for maternal death. Why? Before we look for the answer to this question let's listen to a few brief hypothetical examples of what sometimes happens.

A woman, thirty-nine years old, gravida XII, para X, was admitted to a hospital at thirty-six weeks of gestation, not in labor, but bleeding and in mild shock. A diagnosis of probable placenta previa was made. The patient was given 500 cc. of plasma and additional glucose solution intravenously. No other definitive treatment was carried out. Since blood was not available none was given. Five hours later the patient died of blood loss and shock—undelivered.

Inadequate hospital facilities, lack of assistance and just plain human inertia are also familiar disguises for the treacherous handmaiden as they were in this case.

A woman, thirty-two years old, gravida III, para II, was admitted to a hospital at term and in labor. Four hours later bleeding occurred but vaginal examination revealed no placenta previa. However, the cervix was found to be 5 cm. dilated and the occiput presenting. A manual dilatation of the cervix followed by version and extraction resulted in the delivery of a dead infant and postpartum hemorrhage. The uterus was promptly massaged and packed. Exploration was not carried out. Ergotrate, 500 cc. of whole blood and glucose solution were given but the patient died of hemorrhage and shock three hours later.

Adept at quick change, the handmaiden here participated in the form of poor judgment, overzealousness and too little too late. These tragic stories of the handmaiden's activities were written in blood.

Similar case histories may be found in our maternal death records.

Glaring examples of this sort are by no means common. In retrospect, the mismanagement would certainly be recognized by the attendant. The same cannot be said for the more common, but less apparent shortcomings contributing to hemorrhage deaths. Because of lack of knowledge, insufficient training and less striking evidence of mismanagement the attendant may not recognize his failures of either omission, commission or both. It is in this area that we still find a serious weakness.

The examples presented serve to pin-point some common errors in the chain of events which lead up to hemorrhage and its inadequate control. For the sake of emphasis and brevity these may be listed as follows:

1. Failure to appreciate that serious hemorrhage can sometimes be avoided by anticipation and appropriate management.

2. Failure to remember that hemorrhage may strike anytime. That good obstetric care demands adequate provision to meet this complication whenever it arises.

3. Inadequate hospital standards. Failure on the part of some so-called hospitals to provide

minimum facilities and equipment with which to combat these emergencies. This matter of the substandard hospital is a serious one. It presents many well-known facets that have not yet been solved. Furthermore, this deficiency is not confined to the small institution with its understandable problems.

4. Faulty judgment which leads to use of untimely operative procedures in the absence of justifiable indications and without the necessary skill, assistance or preoperative preparation.

5. "Buck fever." A tendency on the part of the attendant to "freeze" after the initial and sometimes inadequate attempt to stem the bleeding has been carried out.

6. Limited therapeutic repertoire. Sometimes uterine massage, drugs and packing represent the total armamentarium. The familiar too little too late epitaph.

7. Failure to provide and give an adequate amount of blood, or when this is not available, of suitable blood substitute.

Obstetric hemorrhage, in one form or another, is still a highly fatal complication—especially when accompanied by the handmaiden—too little too late. To conquer this major cause of dead mothers each and every one of us must re-evaluate our combat knowledge and requirements. Let's make certain the next maternal death does not occur for the want of precaution; inadequacy of emergency equipment, nor for the lack of full measure treatment. In our care of the obstetric patient let's be sure there is no room for the shadowy and treacherous handmaiden to maternal assassins.

These tombstone observations are not pleasant nor are they easy to take at a time when the quality of obstetric care has presumably reached an all-time high. But they are facts and they cannot be ignored.

There is reason, however, to be hopeful. In several states, and Michigan is one of them, thorough maternal mortality study programs are in progress. There is reason to believe that review of factual data thus made available will uncover therapeutic ropes of sand and permit the inauguration of enlightening educational and other corrective measures.

ANNUAL MAY CLINIC—INGHAM COUNTY MEDICAL SOCIETY

The 26th Annual May Clinic of the Ingham County Medical Society was held at the Hotel Olds, Lansing, Michigan, on May 6, 1954.

The afternoon program consisted of the following four papers:

EMMERSON DAY, M.D., Memorial Center for Cancer and Allied Diseases, New York, Director of Strang Cancer Prevention Clinic. Subject: "Cancer Detection."

JOSEPH A. FARROW, M.D., Memorial Center, New York. Subject: "Differential Diagnosis of Lesions of the Breast."

MICHAEL J. JORDAN, M.D., Memorial Center, New York. Subject: "Importance of Early Diagnosis and Adequate Treatment of Cancer of the Uterus."

LEWIS M. HURXTHAL, M.D., Lahey Clinic, Boston, Massachusetts. Subject: "Diagnosis and Treatment of the Adrenal Glands."

A social hour and dinner was followed by an address by Cornelius P. Rhoads, M.D., Director, The Sloan-Kettering Institute for Cancer Research, Memorial Center, New York. Subject: "Frontiers in Cancer Research; Progress Towards the Chemotherapeutic Control of Neoplastic Disease."

Symposium Highlights Medical Science Building Dedication at Wayne University

By Charles A. Lewis
Administrative Assistant, Wayne University
Detroit, Michigan

"MEDICAL and Pre-Medical Education" was the subject discussed at a symposium which was the highlight of Dedication Day for the Medical Science Building at Wayne University, May 11, 1954.

Prior to the symposium, the building was dedicated in a program in which persons prominent in city and state government (including Mayor Cobo and Governor Williams) and in the medical profession participated.

Events of interest to Michigan's physicians continued to be featured on the evening of Dedication Day and the day following (May 12).

Highlight of Dedication Day evening was a testimonial dinner honoring Dr. William J. Stapleton, Jr., as "Michigan's Foremost Family Physician for 1953" and also as a scholar and teacher. The dinner was sponsored by the Michigan State Medical Society, the Wayne County Medical Society, and the Wayne University College of Medicine Alumni Association.

The newly dedicated Medical Science Building stands east of the other medical training buildings and of Detroit Memorial and Receiving Hospitals.

Participating were four persons who have made recent outstanding national contributions in the medical education field. They were: Dean Joseph Hinsey, Cornell University College of Medicine (chairman); Dean Joseph Wearn, Western Reserve University School of Medicine; Associate Dean Aura Severinghaus, College of Physicians and Surgeons, Columbia University; and Dr. John Deitrick, Professor of Medicine, Jefferson Medical College of Philadelphia.

The Annual Alumni Clinic Day, on May 12, was climaxed with a banquet at the Hotel Fort Shelby.

In the new Medical Science Building, every feature has been designed for optimum teaching facilities at lowest cost.

Suggestions from medical school staffs throughout the country were incorporated into the building plans to achieve maximum utility. At the same time, beauty of design was not forgotten.

The new structure will provide physical facilities to permit enrollment increase from the present level of about 260 students to a new maximum of 400. Michigan's need for doctors, long recognized by Wayne, by Michigan legislators, and by health and education groups in the state, brought the concerted effort that led to breaking of ground for the building in 1951.

Built with a $3,550,000 state grant and almost $900,000 from local sources, the building will supply long-needed lecture halls and laboratory facilities for the school.

The gray brick structure of eight stories has been in partial use since last autumn and will be in complete use next fall. Architects of the building are Smith, Hinchman and Grylls.

The eight-floor height and the shape were adopted in order to harmonize staff and student needs with land availability. Height and shape, combined, have also provided all office and laboratory rooms access to outdoor lighting.

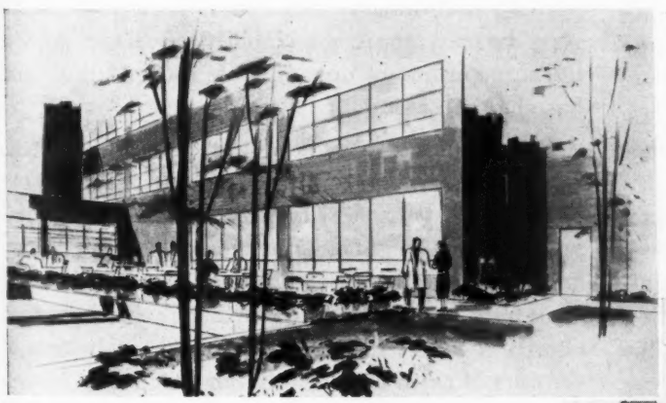
Through imaginative handling, functional needs have been synthesized into a pleasing design. On the exterior, decorative effect has been achieved with alternating bands of buff brick and gray metal, the latter flanking extensive window-glass area. A dark slate strip along the bottom of the building completes the simple exterior design.

In the interior, 141,000 square feet of floor space have been provided, every foot possible being devoted to direct student and faculty use without sacrifice of decorative effect.

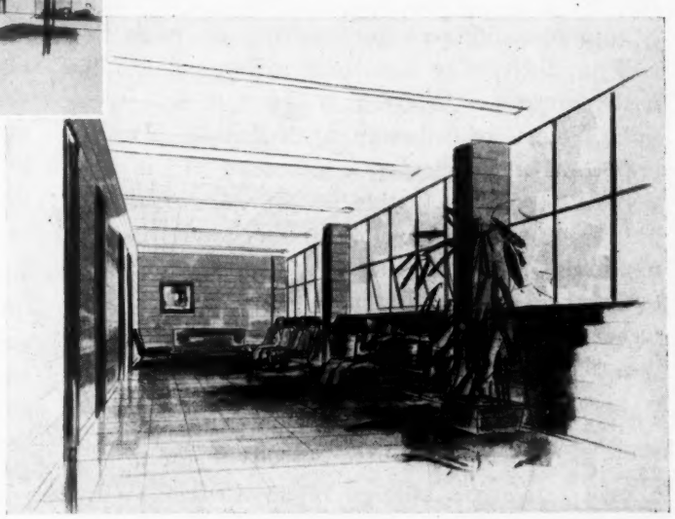
In planning lounge areas, special attention was given to the crowded time schedules of medical students. Lounge areas were made accessible on all the floors most used by students so that their brief periods of free time may be used to greatest advantage. The areas themselves, flanking the elevators, are simply enlarged portions of main corridors.

Consideration was also given to the students' long periods of confinement indoors. It appeared desirable, because of such confinement, to incorporate some feature that would take the students into fresh, outdoor air when weather permitted.

The feature decided upon was an outdoor dining patio overlooking a landscaped area. This is accessible from the cafeteria and may be used through a considerable portion of the year. This feature was accomplished without additional cost, since the concrete floor of the patio is the roof of the transformer room.



An outdoor dining patio is accessible from the building's cafeteria and may be used by students on pleasant days.



Lounge areas are located at elevator entrances on six of the floors.

The Crushed Hand

By Michael L. Mason, M.D., F.A.C.S.

Chicago, Illinois

THE crushed or severely mangled hand presents a complicated problem of repair. The surgeon must salvage a functional unit, often from a seemingly hopeless tangle of torn and crushed tissues. He must not assume too hastily that salvage is impossible nor, in his zeal to retain important structures, should he fail to remove hopelessly injured tissues to the serious jeopardy of his whole efforts.

The general principles of care of the crushed hand differ in no way from that for other open wounds, but their application is often difficult. In brief, the hand should be carefully cleansed, hopeless tissue excised, sacrificing at this time no living tissue and then reconstructing from what is left the maximum of a functioning member possible. Obviously, no two cases will be the same, no routine can be established applicable to all cases, and only broad general principles can guide the surgeon.

Complicated tendon repairs are seldom feasible in these injuries. The surgeon's efforts are directed essentially toward nerve continuity, reducing fractures, placing the hand in the position of function so that the two major motor functions of the hand—pinch and grasp—may be retained or eventually restored, and securing closure by any one method or combination of methods. The minimum aim at the initial operation is to secure primary healing of the hand in the position of function, covered with skin, and with nerves repaired. Anything further that can be accomplished initially with reasonable assurance that primary healing will not thereby be disturbed, is permissible. But if the surgeon is to err, it is better to err on the side of omission rather than commission. It is so important to secure primary healing in the position of function. If this is secured, further reparative surgery is possible in the hand with the minimum of fibrosis, and in a position favorable for further surgery. Extensive reparative primary surgery, in tissue already badly handicapped by the original trauma, may wreck the patient's only chance for a functioning hand. Late reconstructive surgery is always possible; however, this should not have to be an attempt to correct errors in primary care which may often be irreparable.

First aid in these injuries is the same as for other open wounds: simply cover with a voluminous sterile dressing, bandage on snugly to control edema and hemorrhage, and apply a simple splint. Nothing further is done to the hand until the patient reaches a properly equipped hospital and competent surgical care. Exposure of the wound to numerous examinations, uncovering without taking precautions to prevent droplet contamination must be avoided. The wound is accorded the same aseptic handling that is given any clean operative wound.

A careful history is essential. The time of injury is ascertained and also the nature of first aid and any subsequent care, since the surgeon must estimate the possibility of secondary contamination. It is very important to know the exact cause of the wound, since from this is secured information concerning the degree of devitalization of tissues and also the likelihood of serious primary contamination. The nature of the injury is of great significance in the primary care. Knowing this, the surgeon can judge the degree to which the tissues have been devitalized and can judge his excision accordingly. For example, it may not always be easy to judge viability of tissues and if the surgeon knows how severely crushed the hand has been, he can gauge excision accordingly.

Examination of the patient includes not only the wound itself (done under aseptic precautions) but of the patient as a whole, to rule out other injuries which might require priority care. Blood and urine tests are of course carried out. It is well to inquire as to the last meal, since with a general anesthetic which is usually required, aspiration of vomitus may occur. Preliminary gastric lavage may be indicated. X-ray examination of the hand is always indicated, even though the fracture situation may seem perfectly evident.

Care of the wound, under a general anesthetic and in a bloodless field secured by means of a sphygmomanometer (280 mm. Hg) is carried out in the operating room. The surrounding area and then the field itself is carefully washed with soap and water (10 to 20 minutes) and thoroughly irrigated with physiologic saline solution. Then, with a change of gown and gloves, the surgeon proceeds with excision of the wound. This con-

From the Department of Surgery, Northwestern University Medical School, and Passavant Memorial Hospital, Chicago.

Read before the Michigan State Medical Society, 88th Annual Session, Grand Rapids, September 24, 1953.

sists in removing by sharp dissection all tissue destined to necrosis. At this stage, no viable tissue is sacrificed even though the surgeon may feel that it will eventually be useless. The object of this excision is to remove all necrotic tissue so that when the decision as to extent of permissible repair is made all tissues on which this judgement is made are capable of survival. In other words, the surgeon can say to himself, "This is what I have," and "What sort of hand can I construct with what is left?"

Judgment as to viability may be very difficult and can be secured only by experience. Most often the error in excision is made in the case of avulsed skin flaps, which are usually not viable, but the removal of which creates a great defect. Excision of skin edges in sharply cut wounds is seldom required, but crushed skin is more often than not nonviable, often because of thrombosis. Detailed discussion as to excision of various tissues is scarcely feasible in this brief outline; however, the surgeon soon learns that the most valuable criterion of viability is bleeding from cut edges and contractility in the case of muscle. It must not be forgotten that even tiny bone fragments, if they are connected by even the smallest shred of connective tissue, are usually viable and may be very valuable in later reduction of fragmented fractures.

Amputations are undertaken during the phase of excision only if the finger is completely without blood supply, and even here much of the skin is saved for possible use in coverage later on. Amputations of digits because of impossibility of later restoration to function is considered only after the initial phase of excision is accomplished. There are many considerations that come to mind when a viable finger is amputated. Over and above all, must be remembered that it is always possible to amputate later, after a trial of labor. Also one is hesitant to remove even an obviously hopelessly functionless finger if that happens to be the only digit left or if several other fingers are badly damaged. The thumb of course is awarded special consideration and all efforts are directed toward saving every possible bit of it for reconstruction.

Excision accomplished, the surgeon applies compression with moist sponges and releases the blood pressure cuff. After several minutes, the hand is inspected and bleeders not caught during excision are ligated. Skin and other tissues which show themselves to be nonviable can be detected at this time and are excised. The blood pressure cuff is again inflated and reconstruction of the hand is undertaken as far as conditions permit.

There are, as I see it, four musts in the initial reconstruction: (1) repair of divided nerves; (2) reduction of fractures; (3) molding of the hand into the position of function; (4) primary closure of all wounds by whatever means is feasible.

Certain tendon repairs may occasionally be undertaken in the badly crushed wound. The extensors over the back of the hand or fingers may be approximated if adequate skin coverage can be secured. The flexor tendons are best left unrepaired since they are certain to become adherent and require replacement later. Nerves, on the other hand, should be accurately approximated with fine (6-0 or 7-0) silk. It is too often assumed that the digital nerves are too small for repair. Such of course is far from the case and they regenerate so well when repaired that the results are most gratifying. Over and beyond any satisfaction that the surgeon may derive is the consideration for the patient whose sensitive skin is necessary to his use of the hand.

An adequate and stable framework for the hand is difficult to reconstruct if the opportunity for fracture reduction is missed at initial operation. At this time all fractures can be reduced by simply molding the hand into the position of function over a suitable splint. Traction is seldom needed and in the severe crushes one hesitates to use internal fixation. Molding over a splint in the position of function makes it possible for the surgeon to apply a compression dressing at the end of the operation, and this we feel is of great importance.

It is hardly necessary to discuss at length the need for immobilizing in the position of function or for getting the hand into this position. The more experience I have had in surgery of the hand and in correcting badly damaged hands, the more importance I have come to attach to securing the position of function right from the start. So many vicious contractures are prevented, stiffening of joints in extension or in extreme flexion, malposition of the thumb, and wrist, angulation of fractures could be prevented if only the hand were initially placed in the position of function. Even a very modicum of motion is valuable if the fingers and thumb are placed in the grasping position.

Closure of the wounds is likewise a must and although it may seem almost an impossibility, the

surgeon has at his disposal a great variety of methods which singly or in combination can be used for closure. Suture is the best if hand skin is available and here the surgeon will be happy to have saved tags and irregular flaps and to have filleted fingers whose skin can be dovetailed into defects to secure closure. The split thickness skin graft, removed in pieces varying in size from a postage stamp to 4 or 5 inches square is a most valuable source of coverage. When bone, joints or bare tendon must be covered over, a flap of skin and subcutaneous tissue carrying in its own blood supply is needed. The rotation or sliding flap is excellent in such cases, if it can be used, since it does not require the hand to be applied to the abdomen and enables the surgeon to place the hand in the position of function under a compression dressing. The bed from which this flap is taken may be covered by a split graft. When it is absolutely necessary however a pedunculated flap from the abdominal wall should be used to secure coverage.

The operation is completed by the application of a compression dressing. This is applied before the blood pressure cuff is finally released. We consider the compression dressing to be a vital part of the operation and not to be turned over to untrained personnel to carry out. It is the part of the surgeon's job to apply this dressing just as it is his job to carry out the other steps of the procedure. With the hand on a properly padded splint, gauze is placed between the fingers, the thumb is well padded with fluffed gauze to keep it in proper position and then the whole hand covered with voluminous amounts of fluffed gauze and abdominal pads. This whole is then bandaged firmly with woven elastic bandages. Great care is taken to make the pressure even and non-constrictive. This firm but even support helps minimize swelling and edema, controls fine capillary oozing (*not* hemorrhage from small arteries—these should have been ligated), promotes venous drainage, obliterates dead spaces and helps to immobilize the hand. Only after the compression dressing is applied is the blood pressure cuff finally released.

Postoperatively, the hand is kept elevated on a pillow at heart level when the patient is in bed. As soon as he is allowed up—usually the next day—the arm is carried in a sling. Dressings are changed on the fifth to eighth day and the compression reapplied. In the absence of fracture or tendon repair requiring relaxation the splint is discontinued on the tenth to twelfth day and if healing has taken place by primary intention the patient is encouraged to start the use of the hand. Warm soapy washing of the hands is most valuable in encouraging use and promoting circulation.

It is impossible to go into all the variables which go into the operative care, after care and staged operations which management of the crushed hand may demand. I have tried only to stress the most important general principles which underlie the initial care. These are early care under adequate operating conditions with no preliminary tampering, careful mechanical cleansing with soap and water, excision of tissue destined to necrosis, deep repair of nerves and reduction of fractures; tendon repair only in the exceptional instance, closure of the wound at first operation, molding of the hand on a splint in the position of function under a compression dressing. With this start the crushed hand has the maximum chance of functional return within the limits imposed by the destruction of the injury.

AMA INAUGURAL CEREMONY TO BE BROADCAST JUNE 22

The inaugural ceremony at which Dr. Walter B. Martin, Norfolk, Virginia, will be installed as the 108th president of the American Medical Association will be broadcast over a nationwide radio network on Tuesday, June 22.

Originating at 7:30 p.m., Pacific Coast Daylight Saving Time, (10:30 p.m. Eastern Daylight Saving Time) from the Palace Hotel in San Francisco, the program will be carried by more than 340 stations of the American Broadcasting Company's radio network. This will be the fifth consecutive year an AMA president has addressed the nation on the night of his inauguration.

This year, for the first time, the ceremony also will be televised by a local station. KGO-TV will carry the program to television viewers in the San Francisco area.

In addition to Dr. Martin, other AMA officers who will appear on the radio and television broadcasts are: Drs. Dwight H. Murray, Napa, California, chairman of the board of trustees; Edward J. McCormick, Toledo, Ohio, outgoing president, and James R. Reuling, Bayside, New York, speaker of the house of delegates.

Management of Vascular Headaches

By Mason S. Maynard, M.D.
John R. Pedden, M.D.
Grand Rapids, Michigan

DURING THE PAST twenty-five years over 200 articles have appeared in medical journals pertaining just to headache. The result of this clinical research has been that the average clinician understands the headache patient and his problems and can provide symptomatic relief in a vast number of cases. However, there are still 10 to 15 per cent who cannot obtain relief from drugs and it is this group of patients that we shall concern ourselves with in the following paragraphs.

Examination

Our usual office procedure includes the following:

1. Careful history taking—Many times thorough investigation of the patient's background will reveal an emotional problem which acts as the trigger mechanism for the headache attack. By careful examination of the emotional status, we can in many instances, reduce the number of headaches by helping the patient cope with his problems.

2. Laboratory methods including skull x-rays to rule out tumors; cervical spine x-rays; blood chemistries; blood counts and urinalysis; all of which help to exclude headaches due to infections and other causes.

3. Neurological examination.

4. Fundoscopic examination and testing of extraocular response to light.

These tests are particularly helpful in determining whether or not the headache is of the vascular type, i.e., it is produced by vasodilatation of the cranial vessels.

Treatment

Wolff[10] showed that increased amplitude of pulsation of certain cranial arteries, particularly branches of the external carotid, will produce severe head pain. He showed that ergotamine tartrate will reduce this vasodilatation and thus abort the head pain. Ergotamine tartrate (Gynergen-Sandoz) has been employed by us to symptomatically treat such vascular headaches. Others have reported its value.[1,5,9]

(a) If the patient appears to have a severe attack during an office visit, we attempt to abort the attack with 1 cc. ergotamine tartrate intramuscularly or with 1-2 cc. dihydroergotamine (DHE 45-Sandoz) intravenously. We find that this dosage is usually sufficient to produce relief. If the attack has proceeded to the third stage—that of edema of the cerebral blood vessels—then larger doses are often necessary to produce relief.

(b) For subsequent attacks, patients are advised to take two tablets of Cafergot (Sandoz) at the earliest signs of an attack. Many of these vascular headache patients have an aura and are able to determine, often on arising, whether or not they are going to have an attack that particular day. When aura occurs, the patient should be advised to take two tablets of this caffeine-ergotamine mixture immediately. After the headache has already started, but is not fully developed, the patients are instructed to take two tablets and to follow this up every thirty minutes with an additional 2 tablets until a total of 6 or 8 has been taken. The literature stresses the importance of taking this preparation early, i.e., before the vessel walls become edematous and therefore unable to contract.[3,4,6]

We stress to our patients that they should not take their medication three times a day regularly. Cafergot is only effective when the vessel has been "sensitized," i.e., it is either constricted as it is in the aura phase or dilated as in the headache phase.

(c) In some of our patients the headache can be aborted by intramuscular ergotamine tartrate or by oral Cafergot. However, the effect is inconstant since these patients may vomit severely or more often complain of extreme nausea which makes retention of medication difficult.

(d) We have employed dihydroergotamine, 1-2 cc. intramuscularly when nausea and vomiting occur. Both this preparation and ergotamine tartrate must be administered hypodermically and it is difficult to instruct or get the patient to self-administer these medications. They often wait in the hope that the attack will pass or try to reach the physician. Frequently their headache has proceeded to the edematous stage and is difficult to abort.

(e) Recently, there have appeared articles on

the use of a combination of ergotamine tartrate and caffeine alkaloid in suppository form.[2,7,8,11] These investigators observed that the suppository was particularly effective in those patients who presented dominant symptoms of nausea and vomiting. They also concluded that the suppository was effective when other medications had failed to produce desired relief.

We employed this medication in several cases and are reporting two typical case histories.

Case 1.—Mrs. B. R., age fifty, housewife and office employe, had had migraine headaches for many years. The headache usually occurred with her menstrual periods, but also occurred often after emotional disturbances. Onset was gradual with photophobia and sensitivity to bright light. At its peak it was a pulsating pain over the entire left side of the head. Before obtaining medical relief, the headache could last from several hours to a day or two. Physical examination and laboratory tests were within normal range. A skull x-ray was reported to show "benign hyperostosis frontalis interna." *Treatment.*—This patient always obtained satisfactory relief from injections of ½ cc. DHE 45 intravenously or subcutaneously. Cafergot tablets helped if the patient did not vomit. She also obtained relief with the ergotamine-caffeine suppositories, taking one suppository every half hour for a total of three suppositories. In time she found this dose to produce vomiting and obtained adequate relief by taking ½ of a suppository each time.

Case 2.—Mrs. M. B., age forty-three, housewife, had migraine headaches many years. These occurred mainly at the time of menstrual periods but also during times of excitement. The onset would be sudden and the pain located mainly in the right occipital area, though it could involve both sides of the head. It was a pulsating severe pain usually with nausea and vomiting. Occasionally it could last three days. Physical examination and laboratory tests were normal. "Benign hyperostosis frontalis interna" was again reported on the skull x-ray, *Treatment.*—The patient had usually vomited after taking Cafergot tablets. A 1 cc. injection of DHE 45 usually helped if given soon after the headache started. Ergotamine-caffeine suppositories were given at half hour intervals for 2 doses. Relief was obtained comparable to injections of DHE 45. No intolerance was noted.

Summary

Two patients with long-standing migraine headaches have been studied. Both developed vomiting from oral ergotamine preparations and both were helped with injections of DHE 45. Ergotamine-caffeine suppositories also gave relief without causing undesirable reactions.

Conclusion

Our experience with typical migraine headaches shows that the suppository form of ergotamine can be easily administered by the patient, gives adequate relief of the symptoms, and does not cause appreciable side reactions.

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WHAT PER CENT OF THE PER DIEM?

In 1945 subscribers to Michigan Hospital Service paid eight million dollars toward the support of Michigan's hospitals. In 1953 the sum paid was over sixty-two million dollars. This has tended to maintain a ratio of 96 per cent of the contract charges. The number of cases hospitalized has trebled in this nine-year period (from 131,000 to 403,000) and the number of hospital days has almost trebled (from 1,000,000 to 2,825,000). The average case stayed in the hospital 7.73 days in 1945 and 7 days in 1953.

The cost of that 7.73-day stay averaged $54.20 in 1945. It cost $144.79 for the 7-day stay in 1953. This means that the per diem cost of the hospital bed was $7.01 in 1945 and now is $20.66—almost 300 per cent increase in a nine-year period!

Since no commodity used in the hospital or outside the hospital has had a 300 per cent increase in cost in this period of time, the inevitable question is "What is the explanation of the present per diem charge to the subscribers of Michigan Hospital Service?", in view of the fact that neither commodity cost nor the price of the nurses' hands has risen comparably.

It's a good question in view of the fact that the measurable factor of overutilization of prepayment plans by the physician doesn't come anywhere near this figure, measured either by percentages or dollars!

WILLIAM BROMME, M.D.

—Editorial reprinted from the *News Bulletin,* Woman's Hospital, Detroit, May, 1954.

Detroit Physiological Society

Meeting of January 21, 1954

Dry Mounting as a Method of Increasing Contrast in Ordinary and Phase Microscopy

WILLIS W. MATHEWS, *Biology Department, Wayne University*

Objects which are difficult to stain or to see with the usual phase microscopic methods may be made visible with suitably prepared dry mounts. Using this technique with the phase microscope it has been possible to see and photograph unstained objects as small as 0.1 microns in diameter. These include the flagella of E. coli and four other species of bacteria and influenza Type A virus particles. Dry mounts of bacteria and typhus ricketsia are visible with ordinary objectives. Dry blood smears show mitochondria and nucleoli in addition to the nuclei and granules usually visible.

Dry mounts may be made as follows:

Clean No. 1 cover glasses by dipping in 70% alcohol and wipe with a clean cloth. Flame the dry cover glass. Place a drop of suspension at one edge of the cover and tilt the cover, allowing the drop to run across it. Dry rapidly in air without heat. When it is dry, flame the cover glass as in bacterial methods. Mount the cover with the smear down on a clean slide with a ring of shellac or similar material. If the smear shows extensive solid precipitate, it may either be diluted before smearing or the dried smear may be washed with distilled water, air dried and flamed again.

In viewing the smear, glare should be reduced to a minimum by careful adjustment of the microscope illumination.

Evaluation of Sedative Agents

GRAHAM CHEN and CHARLES R. ENSOR
Research Laboratories, Parke, Davis & Co., Detroit, Michigan

The sedative agents may be divided into two major groups: (1) Those having mainly a depressive effect on the central nervous system and (2) those having a duel action, depression and/or stimulation, dependent upon dosage. To the first group belong a large number of barbituric acid derivatives (phenobarbital), acetyl ureas (carbromal), and sodium bromide. As has been reported previously (Chen and Portman, Arch. Neurol. & Psych. 68:498, 1952), the sedative property of this group of agents, in regard to potency, duration of action, and effective dose range, may be quantitatively ascertained by their suppressive effect on chemically induced convulsions of mice. This method is not applicable, however, in determining the sedative effect of the second group of compounds. Morphine, isonipecaine methodone, scopolamine, and diphenhydramine belong to this group. The first three of these were found in our laboratory to suppress the enhanced activity of rats induced by caffeine. This property appears to be unique in that it is not shared by any sedative agent. Scopolamine and diphenhydramine cause excitation in animals predominently; on the other hand, they possess the ability to raise the convulsive thresholds of electrical stimuli in mice. This anticonvulsant property is shown by other sedative agents only at anesthetic dose levels.

It remains to be confirmed as to whether or not these central depressive properties of the various sedative agents, as shown in laboratory animals, may account for some of their therapeutic effects in man. Two additional papers were also presented. The first of these, entitled "Tracer Studies of the Krebs Cycle in Normal and Diabetic Rats" by C. E. Frohman and J. M. Orten of Wayne University, provided no abstract.

The other paper, entitled "Thyroidal Iodine Accumulation of Several Species of Fresh and Brackish Water Teleost Fishes" by Aubrey Gorbman, Olga Berg (Columbia University), and Charles W. Creaser (Wayne University), has been published in *The Anatomical Record*, Vol. 117, Page 535, November 1953.

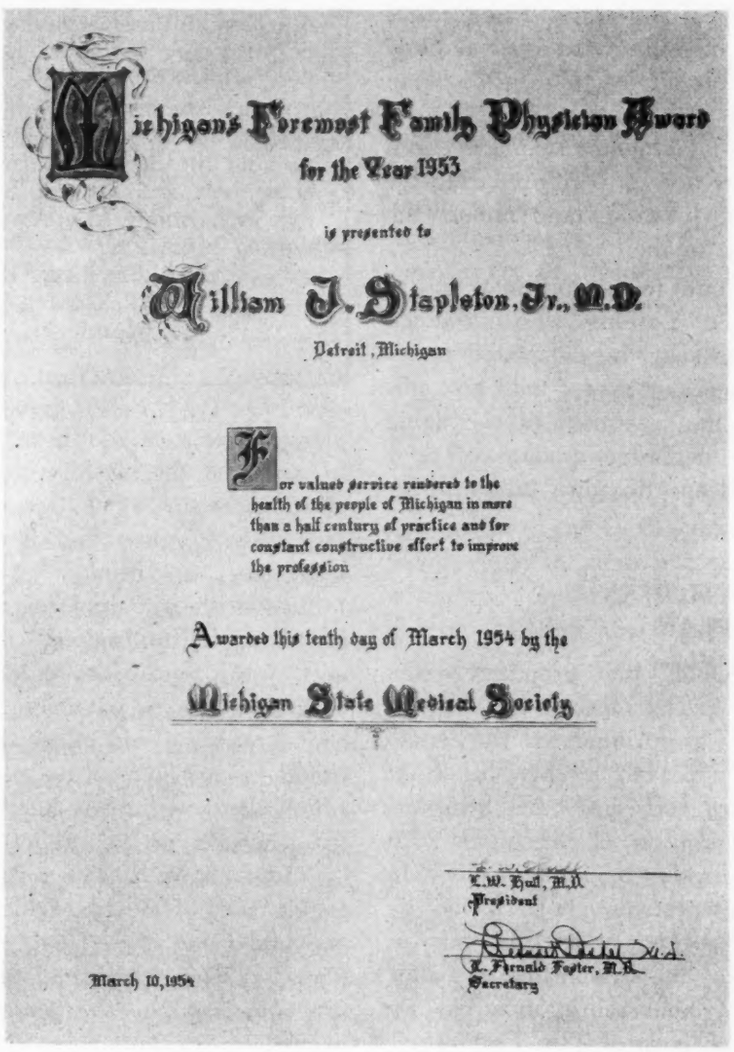
Michigan State Medical Society Past Presidents 1948-1952

With this final panel, depicting MSMS leaders from 1948 to the immediate past Presidents, the review is complete. Here are men who, although they may have pioneered new fields, are at the center of the current history of medicine in Michigan. The period represented here brought some of the greatest threats to medical freedom; threats which for the moment have been surmounted. But nowhere in this group is one who cares to dwell in the past. With thousands of others who believe in MSMS and the future of the medical profession, they look forward.

(This is the final page in a series featuring MSMS past presidents from 1866 to the present. Each month, photographs of past presidents have been presented panel by panel as they appear in a display at MSMS headquarters in Lansing.)

President's Message

It is the custom of the Michigan State Medical Society House of Delegates at each annual session to name one of its members as "Michigan's Foremost Family Phyisican." William J. Stapleton, Jr., M.D., was so named for 1953 in recognition of unusual services to his patients, to his community, and to his profession.



Michigan's Foremost Family Physician Award
for the Year 1953

is presented to

William J. Stapleton, Jr., M.D.

Detroit, Michigan

For valued service rendered to the health of the people of Michigan in more than a half century of practice and for constant constructive effort to improve the profession

Awarded this tenth day of March 1954 by the

Michigan State Medical Society

L. W. Hull, M.D.
President

L. Fernald Foster, M.D.
Secretary

March 10, 1954

Dr. Stapleton was born and raised in Detroit. He was educated in Detroit schools and graduated from the Michigan College of Medicine. He has taught in and has been acting Dean of Wayne University College of Medicine.

It is probable that Bill Stapleton has never had a dull moment in his life, with a large practice, travel, and his extracurricular activities. He has dedicated an immense amount of his time and talents to the betterment of the community in which he has lived, to its great advantage. He has always put service before self. The community and the medical profession are grateful.

L. W. HULL, *President, Michigan State Medical Society*

Editorial

GERIATRICS

THIS NUMBER of THE JOURNAL is being devoted to Geriatrics. Problems of the aging are becoming more involved each passing year. Some of the economic situations have been commented upon throughout the year. The medical and health problems have been the especial study of the Geriatrics Committee of the Michigan State Medical Society, Dr. A. H. Price, M.D., of Detroit, chairman. This committee has been working diligently for over a year preparing for this number of THE JOURNAL, and almost the entire text is devoted to their efforts.

We wish to pay tribute to the chairman and to F. C. Swartz, M.D., of Lansing, who did much of the work and who sent the completed paper to the editor. We hope our readers will give this article attention, as the treatment of the aging will occupy an ever-increasing amount of their time. No one will escape this duty to the older people.

THE ADMINISTRATION'S "REINSURANCE" PLAN

THE "REINSURANCE" plan promised by the President in his special message to Congress on January 18, 1954, was introduced in the Senate on March 11, 1954 (S.3114) by Mr. Smith of New Jersey for himself and eight other Senators, including Senator Ferguson of Michigan. An identical bill was introduced simultaneously in the House of Representatives (H.R. 8356) by Mr. Wolverton of New Jersey as sole sponsor. He is the chairman of the Committee of Labor and Public Welfare whose reinsurance bill we discussed in the March issue of THE JOURNAL.

The expressed purpose of the Administration's new bill is "to encourage and stimulate private initiative in making good and comprehensive health services generally accessible on reasonable terms, through adequate health service prepayment plans to the maximum number of people, (a) by providing technical advice and information, without charge, to health service prepayment plans and to the carriers or sponsors thereof; and (b) by making a form of reinsurance available for voluntary health service prepayment plans where such reinsurance is needed in order to stimulate the establishment and maintenance of adequate prepayment plans in areas, and with respect to services and classes of persons, for which they are needed."

Such is the preamble of the bill quoted word for word. Certainly none will contest the worthiness of the sentiments expressed. This program is limited to prepayment service plans. The casual reader would understand that this scheme would be an inexpensive or no expense service which the government hopes to render: witness the provision in (a) above of technical advice "without charge." The bill sets up "within the Department of Health, Education and Welfare a National Council on Health Service Prepayment Plans." This Council shall consist of twelve members appointed by the Secretary without regard to civil service laws, who shall be familiar with the need for or the availability of personal health services, and not less than four of whom shall be experienced in the administration of health service prepayment plans."

There is no provision for recognition of the medical profession who successfully developed prepayment hospital and medical service plans and demonstrated the insurability of health services, or the Blue Cross-Blue Shield who did the job. What is to prevent the Secretary from appointing Henry Kaiser of Permanentee? or John L. Lewis.

FAULTY UTILIZATION

The development of voluntary prepayment plans and scientific medicine are complementary. The one, scientific Medicine, makes modern hospital care possible; the other, voluntary prepayment, brings modern hospital care within economic reach of the people.

Believe me, it is trite, but worth repeating —the hospital cannot exist without the doctor and the doctor reverts to the horse and buggy era without the hospital. We must live in harmony together and work out our mutual problems.

KENNETH B. BABCOCK, M.D.,
at Golden Goose Breakfast.
March 11, 1954.

We suspected the Kaiser influence when we saw the first release in January and mentioned it editorially—that is the employment of salaried doctors in the plans which sell medical and health services. Such is the technical advice offered—they have not specified choice of the very people best qualified by experience to give such advice.

The Reinsurance Feature

There is also "created in the Treasury of the United States a Health Service Prepayment Plan Reinsurance Fund" to which shall be paid all reinsurance monies, capital advancements, investment returns, or assets from administration of the plan. Special funds must be set up for any special reinsurance plan established, and those monies segregated in the bookkeeping. There is no place in the bill stating the cost of reinsurance, but an amount is to be set by the Secretary which is found to be necessary to meet the needs, as estimated at time of reinsurance. When a carrier has a loss over and above his estimate of cost of administration and cost of insurance, the government reinsurance will take over only for his excessive losses and will pay 75% of them, not of the complete loss. We read in Sec. 307 (c) "the liability of the United States with respect to a reinsured plan shall be limited to the general or special account to which such plan has been allocated."

After June 30, 1959, the expense of administering the whole program, including part (a) shall be charged to and completely covered by the plans. The Federal Government takes no risk whatever after that date. The Reinsurance scheme must be self supporting. The costs of reinsurance are to be reviewed periodically, and can be every ninety days.

Presumably, this administration plan hopes to stimulate the establishment of new prepayment plans in new areas or among new groups of people where there is need. We can find nothing in the plan to further that objective more than what the unassisted plans have been doing for the past two decades except the reinsurance. The Blue Cross and Blue Shield could set up reinsurance if they find it necessary. However, Michigan at least, has not been troubled in that respect.

Unexplored Services

There are many fields in which prepayment insurance could be tried, and we had hoped this Administration would attempt to cover some of these areas: the indigent, either total, or partial, such as the "medically indigent," the unemployed, the old age assistance cases, the dependent children. Such groups are worthy of the same insurance self employed people can buy for themselves. These people, and they constitute a very large number of the population, are rightly the wards of the government, local, state, or national. They are entitled to just as good health care as is possible to give, but they cannot do for themselves, and the laws as now constituted place them under a great handicap.

A few laws could be changed allowing the governments to recognize their responsibility, and also allow the use of health plans now available through the payment of premiums out of money now spent as welfare by the various government agencies, or reimbursement as now done in Michigan with the home town care of veterans.

We believe the Administration plan will be found very inadequate. It places too many restrictions on the voluntary plans if they wish to use the reinsurance. Too little actual information as to cost is given. The whole amount of funds are placed in the U. S. Treasury with its stringent regulations, which is proper. We would be sorry to see the fund used the same as the OASI funds, that is, used for current government expense, and replaced by government bonds. In order to make a payment from this fund the government must either borrow more or issue a new tax. Money cannot be manufactured, and after once used must be replaced from the pockets of the people who pay taxes.

We had hoped this bill would be one we all could grasp immediately. We think it could be so changed. We regret the choice of the term "reinsurance." The plan being considered is definitely not "reinsurance." The program is not compulsory as was the plan proposed by Mr. Wolverton. There is a useful provision for the making of "reinsurance" segments to cover some new avenue of service in which the government could well invest some of its own money, but this bill provides for payment of 75 per cent of excess losses *to the extent of available money.*

We can see no advantage for our Michigan plans as yet, but believe such a program could well be evolved. We have made suggestions along that line.

HEARINGS ON THE ADMINISTRATION'S REINSURANCE BILL

THE REINSURANCE bill sponsored by the administration, Reinsurance of Health Plans (H.R. 8356, S. 3114) was the subject of hearings started March 24, 1954, before the House Committee on Interstate and Foreign Commerce. Mrs. Ovita Culp Hobby, H.E.W. Secretary, testified that the administration's Reinsurance Plan had been developed by the Under-Secretary of Health, Education and Welfare, Nelson A. Rockefeller, together with C. Milton Eddy, Connecticut General Life Insurance Company, Hartford, Conn.; Jarvis Farley, Massachusetts Insurance Company, Boston; Charles G. Hayden, M.D., Massachusetts Blue Shield, Boston; William S. McNary, Michigan Blue Cross, Detroit; H. Lewis Rietz, Lincoln National Life Insurance Company, Ft. Wayne, Indiana; J. Henry Smith, Equitable Life Assurance Society, New York; and James E. Stuart, Hospital Care Corporation (Blue Cross) Cincinnati.

Mrs. Hobby said these consultants were unanimous in agreeing that this was the only kind of voluntary plan the commercial insurance companies would accept, and that there was no opposition.

We were of the opinion that this group when invited to Washington, were handed a bill already written, and asked to make it workable. These gentlemen no matter how efficient could not have written that complicated, very technical 41 page bill in the six days they were in Washington.

Mrs. Hobby said reinsurance to plans (such as Kaiser) that furnish their own medical care could be offered, provided they place control over the manner in which medicine and dentistry are practiced *solely in licensed members of the profession.* She also stressed that (1) the bill forbids exercise of any supervisory or regulatory control over any carrier, hospital or other facility, except as specified in the act, and (2) the program would be wholly voluntary and no individual plans would be reinsured if it could be reinsured privately.

RISING COSTS OF THE HEALTH SERVICE PLAN

YOU are all acquainted with the nature of the project that was started in July, 1952, to investigate the reasons for rising costs in the administration of the health service plans. The Council Committee of which I happen to be chairman was charged with the duty of determining the part played by the doctor in this problem. We had no stomach for the job since we were in effect seeking evidence that might condemn our professional brothers. We approached the problem warily and leaned over backwards in evaluating the findings. You know the results of the survey and I shall not bore you with the details except to repeat that we as doctors have been lax in managing our patient-hospital problems.

The problem of overutilization of hospital service exists over the entire country. From a recent report of the National Opinion Research Center of the University of Chicago for the year June 1952 to June 1953 the days of stay for the insured was thirteen and for the non-insured ten. For surgery the insured averaged seven days while the non-insured averaged four days.

Our figures here in Michigan do not show so wide a difference but they follow the same pattern.

I suppose that these figures are balm to those of narrow mind who insist that voluntary health insurance cannot succeed. But to us who have been the prime movers in this field they constitute just one more flaw that we must correct if we are to keep voluntary health insurance rolling forward.

What is remarkable about this plan is not that so much is wrong but that so much is right. Starting fifteen years ago in an uncharted field that was shunned by all health insurance carriers we have developed the system by trial and error, without preliminary actuarial guidance, to the point where in Michigan alone during 1953 the Hospital Service plan did a gross business of over 68 million dollars.

It was inevitable that errors should appear and become magnified as the volume of business increased. Some of these have arisen from the administrative side, some from the hospitals and public and some from the medical profession. It is with the latter that we are concerned here now.

Remember that this is a service indemnity plan and that you, the doctor, start the patient towards the hospital and manage his stay there. If you feel, as you may have in former days, that the cost is being met by an "insurance company" whose financial setup is none of your worry then you will hospitalize patients for your own or their convenience regardless of the true need; you will

(Continued on Page 589)

William J. Stapleton, Jr., M.D.

Michigan's Foremost Family Physician

To have lived through the last fifty-four years of medicine as an active practitioner is a privileged experience. To live through it and keep abreast of it must be recorded as an unusual accomplishment, and William J. Stapleton, Jr., achieved just that.

Examination of his curriculum vitae gives an inkling of why he maintained a front position among his colleagues. Two years after graduation, he began a career of part-time teaching that lasted forty-five years. He began as lecturer on pharmacology and materia medica in 1902, and, to prepare himself, enrolled in the Pharmacy School of the Detroit College of Medicine. While teaching pharmacology, he became interested in the legal side of medicine and, true to pattern again, he studied law at the Detroit College of Law to prepare himself as a lecturer on medical jurisprudence. From 1907 to his retirement in 1947, he held the professorship of Medical Jurisprudence at Wayne University College of Medicine along with his duties sometime as assistant, for a while as acting and, finally, as Associate Dean.

His loyal and valuable service to medical education was recognized by Wayne University in 1949, when it conferred upon him the degree of Doctor of Arts in Medical Education, just as his loyal and valuable service to the practice of medicine was recognized by our Society in 1953, when the title of "Michigan's Foremost Family Physician" was conferred upon him.

Dr. Stapleton was born in Detroit's Corktown on Christmas Day, 1876. His father was Irish, his mother a Vermont Yankee. A good share of his life was spent in the Corktown area where he maintained his office at Third and Lafayette for many years. Like so many of us of an earlier day, he underwent the discipline of a paper route and various after-school and summer jobs. He still likes to recall the days when he was shaken out of bed by his grandmother each morning at four to cover his *Free Press* route, and his venture into business as a door-to-door tea, coffee and spice salesman.

Dr. Stapleton, an erect six-footer, carries his 200 pounds about as easily as a man in his mid-fifties. He describes himself as having been skinny up to the age of thirty-five when all he had was 135 pounds to cover his six feet of frame. Age has touched him very lightly, both physically and intellectually. His interests, of course, have changed. Years ago he was an ardent theater goer. He knows the classic plays and the prominent actors and actresses that played in them. While he still likes to see a good play or movie, the theater isn't nearly as attractive to him now.

His taste in music has changed also—he prefers the tuneful, rhythmic music that lends itself to humming, "the kind that makes you want to dance," as he puts it.

He has never let up on his love of reading, and his scope is wide. He has been an intense student of medical history, and of books by and about doctors. He likes to read the Bible and still likes a good love story. Current magazines such as the *Saturday Evening Post, Reader's Digest, Holiday, Life, New York Times* and the *Manchester Guardian* are on his regular subscription list. And, he finds time to practice medicine, to write and to visit his old cronies whenever illness sidetracks them. His weekly "By the Way" column and his annual 100 Books for Doctors, in the *Detroit Medical News,* have attracted national attention. Into the words he writes, he passes on the empathy he has with human beings, the gentleness and warmth that is so characteristic of him.

Small wonder it is that Dr. Stapleton belongs to every medical, cultural and civic society of importance or that he has been selected to work on every committee and has occupied every elective office in the Wayne County Medical Society. Of all the jobs he has worked on for Medicine, the one he loves most is his present one of being a member of the Editorial Board of the *Detroit Medical News*. The Board, incidentally, considers him its most valuable asset. He has been urged to publish his "By the Way" in book form and maybe he will—as yet he hasn't said yes and he hasn't said no.

In his younger days Dr. Stapleton did a great deal of traveling, usually to medical meetings. He has visited Europe ten times, has been to Mexico, to South America, to North Africa and the Holy Lands. The impression shouldn't be left that he has given up travel. Let him hear of some historic spot, particularly if there's a medical or a bookish connotation, and away he goes. His diary will record the important parts of his journey. It was such happenings that were chronicled in "The Doctor's Log" that was once a feature of THE JOURNAL of the Michigan State Medical Society.

Dr. Stapleton has two children by his first marriage, David and Sally—both valuable citizens in the community. Several years after the death of his wife, he married Helen Hall, whom many Wayne University graduates will remember as the efficient Secretary of the Dean at the Medical School.

During the Clinical Institute this past March, a testimonial luncheon was given Dr. Stapleton following his award as "Michigan's Foremost Family Physician." The English Room of the Sheraton-Cadillac was filled to overflowing. People came to honor the prototype of the kind of doctor who has won the highest esteem for the profession. He has been around a long time. Judging by the zest and vigor with which he attacks a job, he's going to be around for a long time yet.

Never has the cliche of "so many years young" been more applicable than to Dr. Stapleton. He really is only seventy-eight years young. That is why his friends of all ages call him Bill—respectfully and affectionately. Bill, the fellow that could, if he wanted, sign his name William J. Stapleton,, Jr., M.D., Ph.G., LL.B., F.A.C.P., D.A.M.E.

F. A. WEISER, M.D.

MSMS AND THE SALK VACCINE EXPERIMENT

(Continued from Page 538)

State Health Commissioner, stated that MSMS "concurs with your conclusion to go forward with the experiment on children by mass inoculation of the Salk poliomyelitis vaccine . . . . but would like to make clear" certain reservations and/or understandings. These included:

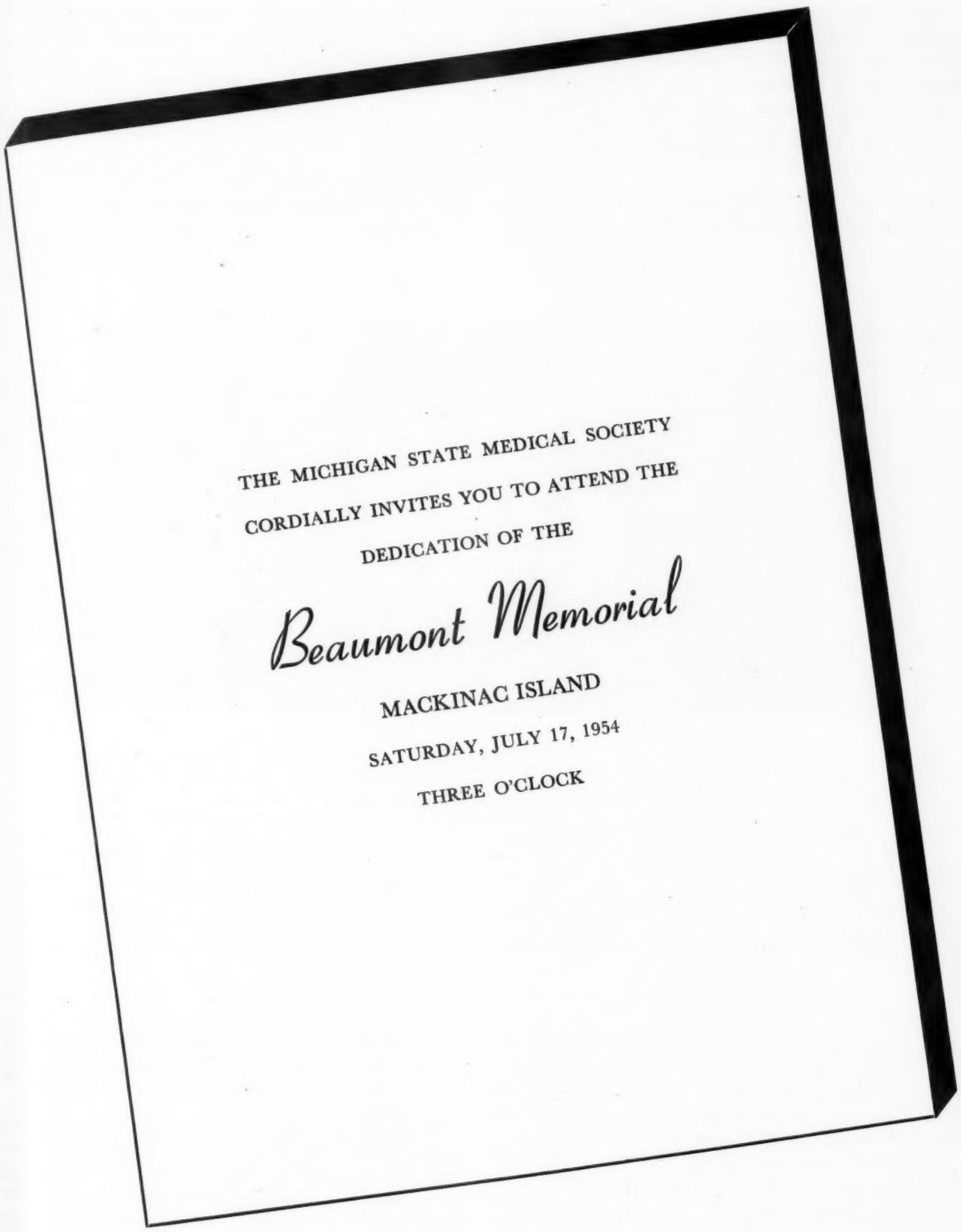
1. That the State Health Commissioner would accept the certification of the special advisory committee of the National Foundation as sufficient evidence of safety and potency of the vaccine, thereby assuming full responsibility. It was pointed out that the April 14, assurances were those of an advisory committee without power or legal responsibility.

2. That the timing of the test would not endanger the children participating, in the opinion of the State Health Commissioner.

3. "That the fact be recognized by all concerned that the National Foundation for Infantile Paralysis assumes all moral, ethical, and legal obligations to the child being inoculated in this highly experimental program."

4. "That upon request by the family doctor of any child participating in the test, the doctor be informed as to whether the child has received the vaccine or the control material, the name of the manufacturer of the vaccine, and other items included in the vaccination records of his patient that he might request."

To all MSMS members, their families and friends—



Dedication of Beaumont Memorial

The dedication of the Baumont Memorial on Mackinac Island next July 17 will climax ten years of close co-operation between the Michigan State Medical Society and the Mackinac Island State Park Commission in bringing to reality the dream of a shrine to William Beaumont, M.D., on the site where he started his revolutionary physiological research.

It was in July, 1944, that W. F. Doyle as Chairman of the Mackinac Island State Park Commission presented the Beaumont Gavel to The Council of MSMS and recommended appointment of a permanent joint committee to work towards the reconstruction of the Earley House to become a memorial to Dr. Beaumont.

The gavel was carved from one of the original timbers in the historic old house, cut from virgin Mackinac Island pine. At the time it was the only timber ever allowed to be taken from the structure. Hand-turned personally by Mr. Doyle, the Beaumont Gavel is still used by the Chairman at every meeting of The Council and of its Executive Committee. It bears a handsome silver plate with the following legend:

Beaumont Gavel
Presented to The Council, MSMS
by the
Mackinac Island State Park Commission
Mackinac Island, July 21, 1944

A DECADE OF DREAMS, hard work and co-operation by the Michigan State Medical Society and the Mackinac Island State Park Commission will be fulfilled July 17 with the dedication of the beautiful Beaumont Memorial. Pictured is the start of it all when W. F. Doyle (standing, center), then Chairman of the Mackinac Island Commission, presented the Beaumont Gavel in 1944 to The MSMS Council. With the exception of Secretary L. F. Foster, M.D., every Council member in the photo has since served as President of MSMS. Seated, left to right, are the late A. S. Brunk, M.D.; the late V. M. Moore, M.D., then Council Chairman who accepted the token, and C. R. Keyport, M.D., of Grayling, President in 1944. Standing, left to right behind Mr. Doyle, are Dr. Foster of Bay City; the late P. L. Ledwidge, M.D.; R. S. Morrish, M.D., Flint; C. E. Umphrey, M.D., Detroit; Wilfrid Haughey, M.D., Battle Creek; E. F. Sladek, M.D., Traverse City; and O. O. Beck, M.D., Birmingham.

In presenting the gavel, Mr. Doyle stated: "We are happy to work with the Michigan medical profession on something of which we all shall be very proud."

Throughout the ten years of planning and building, the Mackinac Island State Park Commission, sparked by Mr. Doyle, has maintained its enthusiasm. . . . And when the Beaumont Memorial is dedicated on July 17, it's certain that among the proudest of those taking part will be W. F. Doyle of Mackinac Island and Lansing.

Additional Contributors to Beaumont Memorial Restoration Fund

Hugo Aach, M.D., Kalamazoo; C. A. Alexander, M.D., Kalamazoo; John V. Allen, M.D., Lincoln Park; Louis Alper, M.D., Detroit; Elliott B. Alpern, M.D., Detroit; Sam Alpiner, M.D., Detroit; George H. Andries, M.D., Detroit; Henry A. Archambault, M.D., Detroit; R. F. Archambault, M.D., Detroit; M. E. Auble, M.D., Detroit.

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Dwight C. Ensign, M.D., Detroit

Michael Faber, M.D., Benton Harbor; Sherman P. Faunce, M.D., Detroit; Meryl Fenton, M.D., Detroit; Leon Fill, M.D., Detroit; Frederick J. Fischer, M.D., Detroit; Norman W. Flaherty, M.D., Dearborn; Joseph L. Fleming, M.D., Detroit; Arthur L. Foley, II, M.D., Rogers City; Leonard Fox, M.D., Wyandotte; John Freedman, M.D., Detroit; Wilmer Freeman, M.D., Detroit.

Ferdinand Gaensbauer, M.D., Pontiac; Henry Galantowicz, M.D., Detroit; Herman B. Gaston, M.D., Detroit; Harold R. Gilbert, M.D., Wyandotte; Arthur Goldberg, M.D., Detroit; Harry Goldberg, M.D., Detroit; Nathan Goldberg, M.D., Detroit; M. I. Goldin, M.D., Detroit; Leo E. Grajewski, M.D., Detroit; William Gramley, M.D., Detroit; William A. Grant, M.D., Milford; Morris Z. Greenberg, M.D., Detroit.

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Richard E. Olsen, M.D., Pontiac; J. M. Oppenheim, M.D., Detroit.

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Edward L. Quinn, M.D., Detroit.

R. O. Ragué, M.D., Benton Harbor; John W. Rebuck, M.D., Detroit; William E. Redfern, M.D., Detroit; H. W. Reed, M.D., Detroit; E. J. Rennell, M.D., Coldwater; Mary Rieger, M.D., Detroit; John L. Riker, M.D., Alpena; Aaron Z. Rogers, M.D., Detroit; John Rosenfield, M.D., Detroit.

M. R. Schmidt, M.D., Trenton; Carlisle F. Schroeder, M.D., Detroit; Ward F. Seeley, M.D., Detroit; Stanley J. Shanoski, M.D., Flat Rock; John A. Sheldon, M.D., Grosse Pte. Park; Richard E. Shipley, M.D., Detroit; John W. Sigler, M.D., Detroit; I. Z. Silvarman, M.D., Detroit; J. Allen Smith, M.D., Detroit; Hugh O. Staley, M.D., Omer; A. H. Steele, M.D., Paw Paw; Ellis H. Steffensen, M.D., Detroit; Fred B. Steiner, M. D., Garden City; Milton B. Stuecheli, M.D., Grosse Pte.; D. E. Szilagyi, M.D., Detroit; Frank J. Szladek, M.D., Ecorse.

William H. Taurence, M.D., Wyandotte; Thomas A. Tenaglia, M.D., Ecorse; Rudolph G. Tenerowicz, M.D., Detroit; Edward G. Truszkowski, M.D., Detroit.

E. G. Upjohn, M.D., Kalamazoo.

(Continued on Page 586)

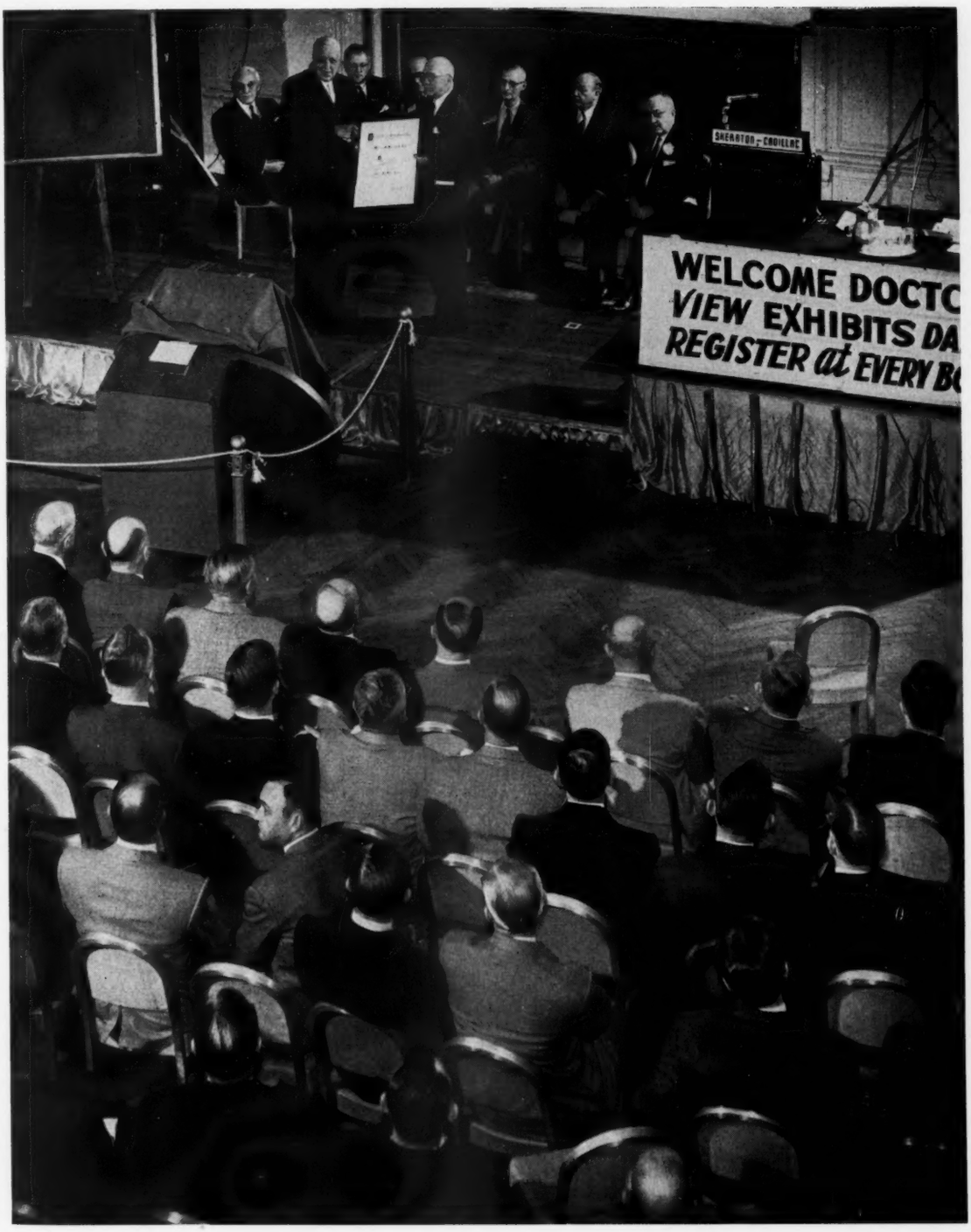
Color TV Big Hit at MCI

FROM THE OPERATING ROOM. . . . Television broadcasts in full color two hours daily were the most dramatic feature of the Eighth Annual Michigan Clinical Institute in Detroit, March 10-12. From "studios" in Harper Hospital (top picture), cameras brought a closeup view of surgery and clinical discussions that otherwise would have been impossible. Note special surgical camera on boom at right.

THROUGH AN ELECTRONIC MAZE. . . . The improvised control room (at right) at the hospital held thousands of dollars in equipment. Skillful technicians manned the bewildering layout to keep the color pictures in balance. Each telecast required a complete crew of 10. Programs were beamed by microwave relay from the hospital to the top floor of the Sheraton-Cadillac.

RECOGNITION in the form of an honorary scroll was given Smith, Kline & French Laboratories of Philadelphia, sponsor of the television series. Lewis M. Lang (right), director of the TV unit, accepted the scroll from MSMS President L. W. Hull, M.D., during the first telecast.

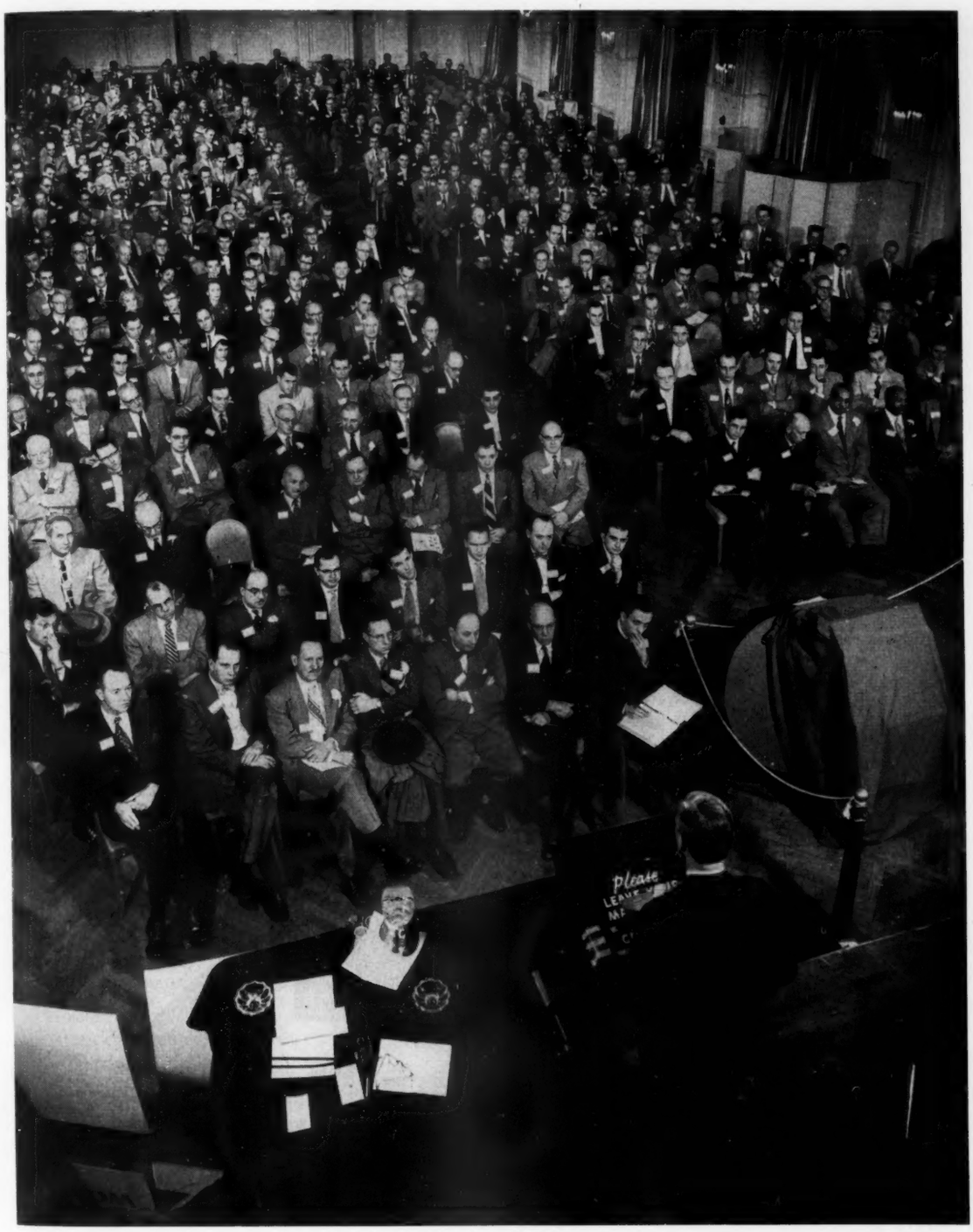
ONTO A GIANT SCREEN. . . . From a massive projector, the picture was thrown on a screen in the Grand Ballroom. Attendance at the television broadcasts averaged 430, with a peak of 543 on March 11. The 1954 MCI was the second statewide medical meeting in the nation to feature color telecasts.



"FOREMOST FAMILY PHYSICIAN" of the year, William J. Stapleton, Jr., M.D., of Detroit, received his scroll from L. W. Hull, M.D., MSMS President, at the close of the first assembly. Afterwards, Dr. Stapleton was honored at a luncheon. (See profile sketch of Dr. Stapleton elsewhere in this issue.)

(Above) RECORD-BREAKING NUMBERS visited every display in the exhibit area before and after each assembly and during intermissions. Registration for the 1954 Michigan Clinical Institute totaled 2,503, the greatest since the mid-year series began in 1947. The exhibit also was the greatest in MCI history, presenting a varied array of products, equipment and services vital to the practice of medicine.

(Below) CROSS-SECTION OF MICHIGAN medicine is typified in this segment of the audience at the Eighth Annual MCI. Pictured gaining facts significant to their daily practice are doctors of medicine, young and old, from communities large and small. If you could read their badges, you would find represented in this one small group several fields of medicine, the President of a county medical society, an MSMS Past President, residents and visiting Canadian M.D.'s.



A PACKED AUDITORIUM heard Albert B. Sabin, M.D., of Cincinnati, present his lecture on the controversial topic of vaccination for poliomyelitis. Often the MCI serves as a testing ground for new ideas in medicine and new techniques for presenting them. Already plans have been laid for adding "something new" in 1955 which will dramatically emphasize the rapid progress of medical science.

COLOR TV BIG HIT AT MCI

MANY RELATED GROUPS find the MCI an excellent time to hold meetings. Among the more than twenty special events held in conjunction with the 1954 institute was the annual meeting of the Michigan Heart Association Board of Directors, at which Frank Van Schoick, M.D., of Jackson, assumed the presidency. The newly-formed Michigan Chapter, American College of Surgeons, held its first all-day meeting March 9, the day before the MCI opening. (Top photo)

MCI PRESS COVERAGE was intense, with Dr. Sabin's views gaining the widest attention. In a special pressroom conference following his lecture, he discussed his research with science writers representing Detroit newspapers, nationwide wire services and the *New York Times*. Other speakers received a similar reception by newsmen seeking to interpret the advance of medicine. (Center)

SURGICAL MOTION PICTURES, shown continuously throughout each day, have contributed greatly to the success of the MCI for several years. At the 1954 institute MSMS paid tribute to Davis & Geck, Inc., of Danbury, Conn., producer and sponsor of the long series of color movies. A. Weisbrodt (left), director of the Davis & Geck film library, accepted a scroll from L. W. Hull, M.D., MSMS President. (Bottom photo)

Normal Colon

Ulcerative Colitis

Atonic Colon

Smoothage and Bulk in Correcting Constipation

To initiate the normal defecation reflex, the "smoothage" and bulk of Metamucil® provide the needed gentle rectal distention.

Once the habit of constipation has been established, due to any of a large number of causes, it becomes a major problem. Self-medication with irritant or chemical laxatives, or repeated enemas, usually causes a decreased, sluggish defecation reflex and may result in its complete loss.

Rectal distention is a vital factor in initiating the normal defecation reflex, and sufficient bulk is thus of obvious importance in restoring this reflex. Metamucil provides this bulk in the form of a smooth, nonirritating, soft, hydrophilic colloid which gently distends the rectum and initiates the desire to evacuate. Metamucil demands extra fluid, imparting even greater smoothage to the intestinal contents.

It is indicated in chronic constipation of various types—including distal colon stasis of the "irritable colon" syndrome, the atonic colon following abdominal operations, repressions of defecation after anorectal surgery and in special conditions such as the management of a permanent ileostomy. Metamucil is the highly refined mucilloid of Plantago ovata (50%), a seed of the psyllium group, combined with dextrose (50%) as a dispersing agent.

The average adult dose is one rounded teaspoonful of Metamucil powder in a glass of cool water, milk or fruit juice, followed by an additional glass of fluid if indicated.

Metamucil is supplied in containers of 4, 8 and 16 ounces. It is accepted by the Council on Pharmacy and Chemistry of the American Medical Association. G. D. Searle & Co., Research in the Service of Medicine.

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

BIRTHS SET NEW MARK IN 1953

Provisional figures for 1953 show a cumulative total of 181,518 births, highest number to be registered in any one year in the history of the state. The provisional total for 1952 was 176,642, a record up to that time.

SUMMER TOPICAL FLUORIDE PROGRAM SET

This summer, some 20,000 boys and girls in thirty-six Michigan counties will have an opportunity to have topical applications of fluoride to their teeth in a statewide program carried on for the fourth year under the direction of the Section of Public Health Dentistry of the department.

The work will be done by forty-seven junior dental students and dental hygienists from the University of Michigan. It will be supervised in the communities by the local dentists, with assistance from health, school and civic groups.

The boys and girls treated will be from three to thirteen years of age. A fee of $3 to $4 will be charged, sufficient to reimburse the students for living expenses and to pay for expendable supplies.

Growth of the summer fluoride program since it was started in 1951 proves its value. In the first year, seventeen students treated the teeth of 5,700 children. In 1952, in response to increased community requests and student interest, the number of students grew to twenty-seven and they treated 11,000 boys and girls. In 1953, students numbered thirty-seven and boys and girls benefiting reached 16,500. This year, forty-five students are expected to treat the teeth of 20,000 boys and girls in the thirty-six counties scheduled.

COMPLACENCY A PROBLEM IN VD CONTROL

Public complacency is creating a very real problem in venereal disease control. This complacency together with over-confidence in penicillin treatment, incomplete reporting of cases, inadequate contact interviewing and tracing along with greatly reduced appropriations for venereal disease control have created a vicious cycle. Unless this cycle can be broken there is serious danger that the outstanding progress of the last decade in the control of the venereal diseases will be lost.

Communities need to be made aware of the problems that exist in their immediate areas. Information on the incidence of the veneral diseases by area will be furnished to health departments and physicians by the Division of Tuberculosis and Adult Health upon request.

VISION AND HEARING TRAINING FOR LOCAL TECHNICIANS

Short courses will be offered again this summer to train locally employed persons to do vision and hearing screening as a part of community programs. As in the past, the courses will be given in co-operation with teacher training colleges, and a limited number of stipends for board and room will be available from the department.

The course for vision technicians will be held at Central Michigan College of Education at Mt. Pleasant, July 12 to 16, with possible courses at Ypsilanti and Kalamazoo also.

The course for hearing technicians is planned for the week of June 28 at Michigan State Normal College at Ypsilanti.

REVISED DIRECTORY OF LOCAL HEALTH DEPARTMENTS ISSUED

The newly revised Directory of County, District and City Health Departments, issued by the Division of Local Health Administration of the department, is available upon request.

NEW SEX EDUCATION PAMPHLET FOR PARENTS

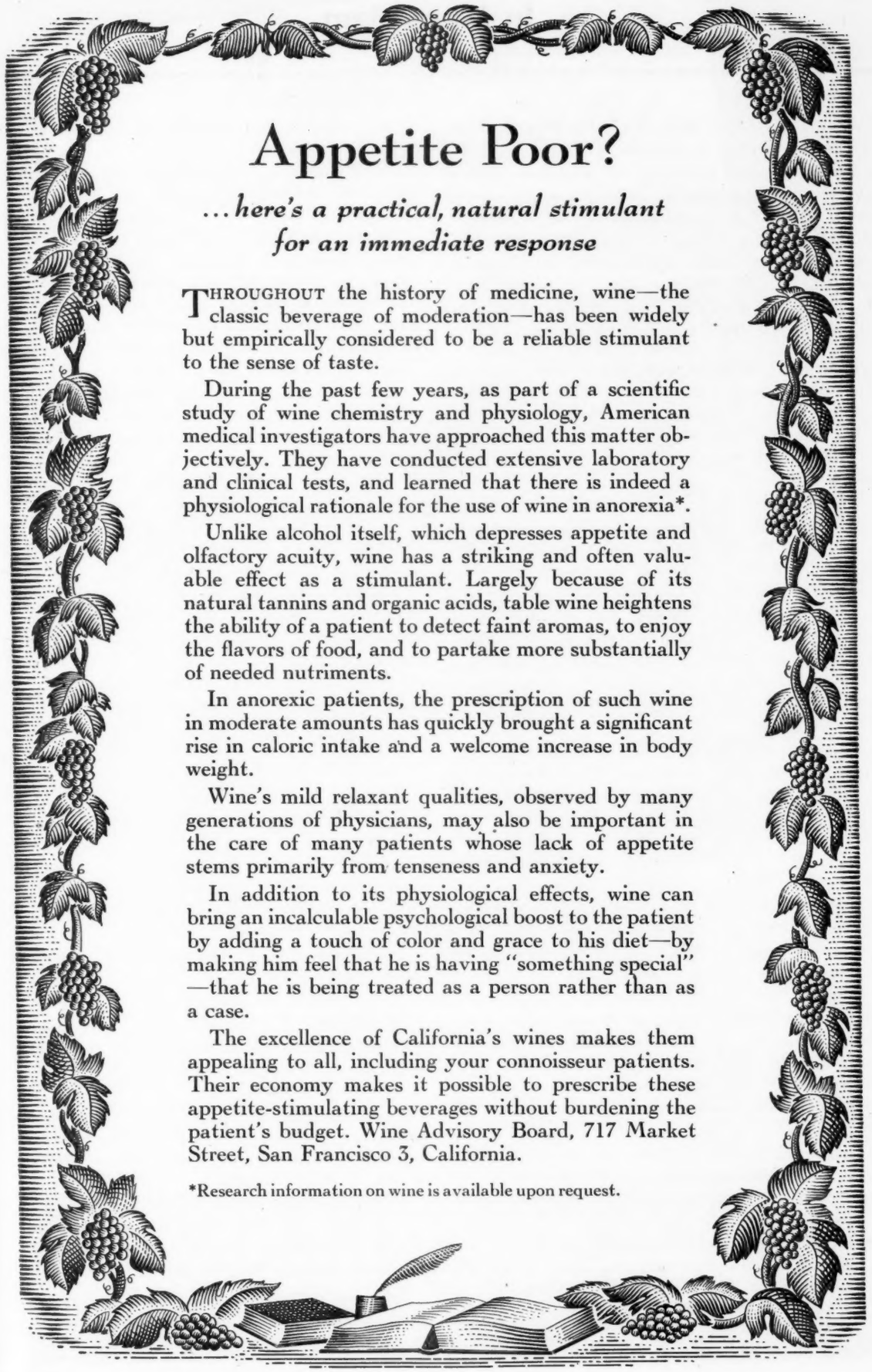
A pamphlet that physicians may find useful for inquiring parents is "Sex Education within the Family," recently issued by the Michigan Department of Health. It is a joint publication with the Michigan Department of Mental Health and is used by both departments in their work with parents. It is available from local health departments and from the Michigan Department of Health.

"EXPECTANT PARENTS" IS NEW VERSION OF "HEALTH OF THE PROSPECTIVE MOTHER"

A new booklet, "Expectant Parents," has been issued by the department to take the place of "The Health of the Prospective Mother" which has been in print for many years. In the new booklet, written for both mothers and fathers, more emphasis has been placed upon the mental health aspects of pregnancy and on the importance of nutrition during pregnancy and lactation. Chapter headings are set up on the basis of a possible sequence of classes for expectant parents. The booklet is available from the Section of Maternal and Child Health of the department.

REORGANIZED MICHIGAN PUBLIC HEALTH ASSOCIATION NOW FUNCTIONING

At the 33rd Annual Michigan Public Health Conference at the Statler in Detroit, May 5 to 7, the reorganized Michigan Public Health Association got under way. The Association now has a comprehensive framework of divisions, with leadership vested in a house of delegates and a board of directors.



Appetite Poor?

... here's a practical, natural stimulant for an immediate response

THROUGHOUT the history of medicine, wine—the classic beverage of moderation—has been widely but empirically considered to be a reliable stimulant to the sense of taste.

During the past few years, as part of a scientific study of wine chemistry and physiology, American medical investigators have approached this matter objectively. They have conducted extensive laboratory and clinical tests, and learned that there is indeed a physiological rationale for the use of wine in anorexia*.

Unlike alcohol itself, which depresses appetite and olfactory acuity, wine has a striking and often valuable effect as a stimulant. Largely because of its natural tannins and organic acids, table wine heightens the ability of a patient to detect faint aromas, to enjoy the flavors of food, and to partake more substantially of needed nutriments.

In anorexic patients, the prescription of such wine in moderate amounts has quickly brought a significant rise in caloric intake and a welcome increase in body weight.

Wine's mild relaxant qualities, observed by many generations of physicians, may also be important in the care of many patients whose lack of appetite stems primarily from tenseness and anxiety.

In addition to its physiological effects, wine can bring an incalculable psychological boost to the patient by adding a touch of color and grace to his diet—by making him feel that he is having "something special"—that he is being treated as a person rather than as a case.

The excellence of California's wines makes them appealing to all, including your connoisseur patients. Their economy makes it possible to prescribe these appetite-stimulating beverages without burdening the patient's budget. Wine Advisory Board, 717 Market Street, San Francisco 3, California.

*Research information on wine is available upon request.

In Memoriam

CARL C. BAILEY, M.D., died February 9, 1954, in Detroit at the age of fifty-six.

A graduate of the University of Michigan Medical School, Dr. Bailey served his internship at Providence Hospital. He had practiced in Detroit since 1923.

Dr. Bailey was a veteran of World War II and a member of the American Academy of General Practice.

Surviving are his widow, Clara; a son, William Bailey, M.D.; a daughter, Mrs. Marilyn Reed; his father, and three sisters.

WILLIAM ROSS BALLARD, M.D., retired Bay City surgeon, died February 11, 1954, at the age of eighty-five. Prior to his retirement seven years ago, Dr. Ballard had practiced in Bay City for more than forty years. Dr. Ballard was elected an emeritus member of MSMS in 1946.

Dr. Ballard had served as chief of staff both at Mercy Hospital, Bay City, and Women's Hospital, Saginaw. He was one of the first two doctors of medicine in Bay County to be named a Fellow of the American College of Surgeons, receiving this honor in 1922.

Born in Washington, Illinois, he attended public schools in Pioneer, Ohio, later teaching school in Ohio. He graduated from the Michigan College of Medicine and Surgery, Detroit, in 1894. Dr. Ballard took postgraduate studies in Chicago, Mayo Clinic, and Johns Hopkins University.

Dr. Ballard first practiced in Auburn, moving to Saginaw in 1900. He entered practice in Bay City in 1905. He was an enthusiastic sportsman, and traveled widely on numerous hunting trips. He was active in fraternal societies, and was a member of the Kiwanis Club. He was a member of the First Presbyterian Church.

Dr. Ballard is survived by a daughter, Mrs. Kathleen Plum; two sisters, Mrs. Samuel Houghton and Mrs. Samuel Cooper, all of Bay City; two grandsons and one granddaughter.

LOUIS BRAITMAN, M.D., of Detroit, passed away suddenly on January 23, 1954, at the age of forty-five. A member of the Michigan State Medical Society Legislative Committee, Dr. Braitman had attended a meeting of that group in Lansing the evening before his death.

Dr. Braitman, born in Detroit, was graduated from the University of Michigan Medical School in 1931. He interned at Receiving Hospital and at Eloise Hospital, where he was a resident in surgery from 1933 to 1935.

Dr. Braitman had been in surgical practice in Detroit since 1935. Dr. Braitman was on the staffs of Grace Hospital and Mt. Carmel Mercy Hospital, and acted as voluntary assistant in the out-patient department of Grace Hospital. He was a member of the American College of Surgeons and the Detroit Surgical Society. He also was active in the Probus Club and the Maimonides Society.

Dr. Braitman is survived by his wife, Arabelle, a son, Robert E., and a daughter, Marcia.

NANCY RODGER CHENOWETH, M.D., a pioneer woman physician in Michigan, who first practiced medicine in the Upper Peninsula before the turn of the century during the booming lumber days, died February 15, 1954, in Peterborough, Ontario, at the age of eighty. She had been an emeritus member of the Michigan State Medical Society since 1945.

Born in Belwood, Ontario, Dr. Chenoweth finished high school in Fergus, Ontario, in 1889 and entered Trinity Medical College and Women's Medical College of Toronto, which later were incorporated with the University of Toronto. Receiving her M.D. degree in 1894 at the age of 21, she began practice in Menominee, where she remained for ten years until her marriage to the Rev. George T. Chenoweth in 1905.

With her husband, a Methodist minister, she went to northwestern Canada, practicing in wilderness communities of Alberta and British Columbia.

Following the death of her husband in 1911, Dr. Chenoweth returned to Michigan and began practice in Escanaba, where she remained in practice until 1947. After a refresher course and postgraduate study in x-ray at the University of Chicago in 1915, Dr. Chenoweth installed one of the first x-ray machines in the Upper Peninsula.

Although in failing health, she continued in active practice throughout the doctor shortage during World War II.

In 1947 she renewed her license to practice in Ontario, and moved to Peterborough to become associated with her son, Rodger Chenoweth, M.D. Illness forced her to retire from practice in 1950.

Dr. Chenoweth is survived by her son, and one sister.

BENJAMIN F. COOPER, M.D., a lifelong resident of the Detroit area and a practicing physician in Detroit, since 1931, died suddenly January 19, 1954. He was forty-two years old.

Dr. Cooper was graduated from the Wayne University College of Medicine in 1929. During World War II, he was a major in the Army Medical Corps. He interned at Grace Hospital.

Dr. Cooper was on the staff of both East Side General Hospital and Holy Cross Hospital. He was a Fellow of the American College of Surgeons and a member of the Detroit Surgical Society.

Survivors include his wife, Elizabeth, and three children, Thomas, Peggy, and Sue.

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JOSEPH L. DeROSIER, M.D., who had practiced in Detroit since 1913, with the exception of his service in World War I, died December 1, 1953. He was sixty-six years old.

Born in Canada, Dr. DeRosier came to this country to attend the University of Maryland. He received his M.D. degree in 1911 and interned at St. Raphael Hospital, New Haven, Connecticut.

During World War I, he served as a flight surgeon from August, 1917, to November, 1919.

Dr. DeRosier is survived by his wife, Helen; two daughters, his father, three brothers, and two grandchildren.

ANDROS GULDE, M.D., who had practiced in his native community of Chelsea for the past fifty years, died December 22, 1953, at the age of seventy-nine.

A life member of the Michigan State Medical Society, Dr. Gulde was nominated in 1952 by the Washtenaw County Medical Society as "Michigan's Foremost Family Physician."

Following his graduation from Chelsea High School, Dr. Gulde attended the University of Michigan, graduating from the Medical School in 1903. All of his professional career was spent in Chelsea with the exception of one year during which he studied in the Graduate School of the University of Vienna in Austria.

For many years, he was a director of the Chelsea State Bank.

Dr. Gulde is survived by his wife Eunice; a daughter, Mrs. William S. Doyle, of Lowell, and a son Andros of Evansville, Indiana. Three grandchildren also survive.

WILBER F. HOYT, M.D., who served the community of Paw Paw as a family physician for fifty-six years, died March 17, 1954, at the age of ninety-one. He was an Emeritus member of MSMS.

Dr. Hoyt was graduated from Michigan Agricultural College and from Starling Medical College, now Ohio State University Medical School. He spent a year as resident physician at St. Francis Hospital. On two occasions, in the early 1900's, Dr. Hoyt traveled abroad taking post-graduate work at Samaritan Hospital, London.

Before moving to Paw Paw, Dr. Hoyt practiced five years in Grand Rapids.

Dr. Hoyt was credited with having assisted in the delivery of some 1,200 infants. In 1951, he was honored at a community banquet in Paw Paw.

He had been in ill health for several years.

ROELOF LANTING, M.D., director of the Shiawassee County Health Department, was killed December 13, 1953, when his private airplane crashed near East Lansing.

Dr. Lanting, fifty years old, was returning from Selfridge Field to his home in East Lansing after partici-

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ROELOF LANTING, M.D.

(Continued from Page 572)

pating in a training program of the 439th Fighter Bomber Wing Reserve Unit, in which he was a Lieutenant Colonel and Flight Surgeon.

Dr. Lanting first became director of the Shiawassee County Health Department upon his return from active service in World War II. In 1946, he moved to Lansing as City Health Director, later becoming director of the combined Lansing-Ingham County Health Department. He returned to the Shiawassee County position in July, 1952. Prior to his war service, he had held public health positions in Kentucky and the Upper Peninsula of Michigan.

Born in Jamestown, Michigan, Dr. Lanting was a graduate of Hope College and the University of Michigan Medical School.

He had been a licensed pilot since 1937, and had made private flights all over the Western Hemisphere.

He is survived by his widow, Helen Lanting, M.D., director of the Lansing Child Guidance Clinic; a daughter, Mrs. Gaynor Dykstra, of Detroit, and a son, Derk Lanting, of Camp Kilmer, N. J. Two sisters and four grandchildren also survive.

WILLIAM E. McNAMARA, M.D., one of Lansing's best-known surgeons, died January 19, 1954, following a long illness. He was seventy-six years old.

Born in Brighton, Dr. McNamara was graduated from the University of Michigan Medical School in 1902. He practiced in Brighton until 1905 when he moved to the Upper Peninsula.

Since 1912 he had practiced in Lansing, and was a past president of the Ingham County Medical Society and a former Chief of Staff of St. Lawrence Hospital.

Dr. McNamara was a Fellow of the American College of Surgeons.

He also was active in civic and business affairs. He was a founder of the Michigan Life Insurance Company, and one of its directors for many years. Dr. McNamara was the first president of the Peoples State Bank, Lansing, and a member of the first Board of Directors of the Central Trust Company. He also participated in fraternal affairs.

Dr. McNamara was a great hunter and sportsman, highly interested in the field of conservation and reforestation. He traveled throughout the world. He was a founder of the Hiawatha Sportsmen's Club and maintained a summer home at the Club.

Dr. McNamara is survived by two sons, B. E. McNamara, M.D., and W. B. McNamara, both of Lansing, two daughters, Mrs. Frank B. Woodruff, New York City, and Mary Jane McNamara, a first lieutenant in the WAAF; nine grandchildren and two great-grandchildren.

JACK L. MILLER, M.D., who practiced in Jackson since 1938 following his internship at W. A. Foote Memorial Hospital, died February 14, 1954, after an illness of several months. He was forty-three years old.

Born in New York City, Dr. Miller moved to De-

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JACK L. MILLER, M.D.

(Continued from Page 574)

troit as a youth and was graduated from Detroit Northern High School in 1929. He attended Wayne University, graduating from the College of Medicine in 1936.

Dr. Miller was on the staffs of both Foote and Mercy Hospitals in Jackson and had served as Chief of Obstetrics at Foote Hospital for two years.

He was a member of the American Academy of General Practice.

Dr. Miller served as an officer in the Army Medical Corps from 1942 until 1946, attaining the rank of captain. Most of his war service was in the Aleutian Islands. Dr. Miller's survivors include his widow, Jessie; a daughter Rhoda; two brothers, Sam Miller, M.D., California, and Maurice Miller of Detroit; two sisters, Mrs. Samuel Leib, and Mrs. Alfred Mitteldorf, Detroit, and his mother Mrs. Rebecca Lesser, also of Detroit.

BENJAMIN NIBBELINK, M.D., died January 10, 1954, in Kalamazoo, where he had practiced since 1912. He was sixty-six years old.

Dr. Nibbelink was a native of Grandville. He was a graduate of the Detroit College of Medicine, and specialized in obstetrics.

Surviving are his widow and two sons, Don D. of Rochester, N. Y., and Paul, serving in the Army at Fort Leonard Wood, Missouri. Two grandchildren also survive.

DeVERNE C. SMITH, M.D., of Flint, died December 17, 1953, at the age of seventy-three.

Dr. Smith was a native of Vernon Center, New York, and had practiced medicine in Flint since 1918. He was a graduate of the University of Michigan Medical School receiving his M.D., in 1903. Before moving to Flint he had practiced medicine in Flushing, New York.

He was elected to life membership in MSMS in September, 1951.

Dr. Smith is survived by his widow, Blanche; a son, Eugene C. Smith, M.D., and a daughter, Mrs. Donald Seal, all of Flint. Also surviving are four grandchildren, two sisters, and a brother.

BERNARD H. STARMANN, M.D., of Cass City, died suddenly March 12, 1954, at the age of forty-seven. He was stricken in his automobile at night while making a professional call.

Dr. Starmann was born in St. Joseph, Missouri, and was graduated from Creighton University at Omaha, Nebraska. After interning at St. Mary's Hospital in Detroit, he started practice in Cass City in 1932.

Dr. Starmann was a past president of the Tuscola County Medical Society, a charter member of the Gavel Club and a leader in various community activities.

He is survived by his widow, Lucy; three daughters, one son, and a sister.

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LOUISA AUGUSTA ROSENTHAL THOMPSON, M.D., first woman to graduate from University of Michigan medical school, died March 31, 1954 in a Spring Lake nursing home. She was ninety-four.

Dr. Thompson was a native of Fort Wayne, Indiana. She received her medical degree in 1884. She was also a graduate of the University of Vienna.

Dr. Thompson first practiced in New York City before moving to Traverse City and later to Grand Rapids. She retired thirty-five years ago and moved to Spring Lake. Her husband, also a physician, died many years ago.

H. ROY WILSON, M.D., of Saginaw, died February 16, 1954, at the age of seventy-four, following a prolonged illness.

A native of Saginaw, Dr. Wilson attended public school and was graduated from the former Saginaw Valley Medical College.

For almost fifty years, Dr. Wilson served as Saginaw physician for the Chesapeake and Ohio Railroad, formerly the Pere Marquette. His father, Joseph M. Wilson, M.D., with whom he started practice, first started the family association as railroad physician.

In earlier days, Dr. Wilson was considered an authority on infections and was credited by many railroad men for salvaging limbs injured in train accidents.

Dr. Wilson has been a Retired Member of MSMS since 1947.

Dr. Wilson is survived by his wife, Hallie; a son, Joseph, a sister, and two grandchildren.

BIRTH RATE FOR 1953

The live birth rate for 1953 was 29.2, exactly the same as last year's, according to Dr. Joseph G. Molner. The actual number of births was considerably higher than last year's 56,949 and the reason the rate remained the same was because there was a corresponding increase in population.

Virtually, 100 per cent of the babies were delivered by physicians and 99 per cent of them were born in hospitals. These figures are encouraging because they indicate an increasing awareness of the value of medical care before and at the time of delivery—*Detroit Medical News,* Feb. 8, 1954.

Doctor: Have you been ordering unnecessary treatment or services for your Blue Cross-Blue Shield patients?

. . . . . NEWS MEDICAL

MICHIGAN AUTHORS

A. C. Furstenberg, M.D., Ann Arbor, is the author of an article entitled "Introduction, Diagnosis and Differential Diagnosis" for a symposium: "Carcinoma of the Larynx" which was presented at the Fifty-Eighth Annual Session of the American Academy of Ophthalmology and Otolaryngology, October 11-16, 1953, Chicago, Illinois, and published in *Transactions, American Academy of Ophthalmology and Otolaryngology,* January-February, 1954.

N. Craig Roberts, M.D., and **Christopher Deen, M.D.,** Detroit, are the authors of an article entitled "Conservative Management of Orbital Injuries" published in *Kresge Eye Institute Bulletin,* August, 1953.

N. Craig Roberts, M.D., Detroit, is the author of an article entitled "Report of Bacillus Pyocyaneus Infections of the Eye," Report of Four Cases, published in *Kresge Eye Institute Bulletin,* August, 1953.

Joseph K. Heckert, M.D., Lansing, is the author of an article entitled "Headaches Due to Tonsils and Adenoids" reprinted from THE JOURNAL of the Michigan State Medical Society, January, 1954, in the *Digest of Ophthalmology and Otolaryngology,* March, 1954.

George L. Waldbott, M.D., F.A.C.P., Detroit, is the author of an article entitled "Further Observations on Smokers Respiratory Syndrome" digested from *Annals of Internal Medicine,* November, 1953, and published in the *Digest of Ophthalmology and Otolaryngology,* March, 1954.

H. E. Madalin, M.D., Detroit, is the author of an article entitled "Anaphylactoid Reaction Following Use of a Penicillin Lozenge," digested from THE JOURNAL of the Michigan State Medical Society, January, 1954, in the *Digest of Ophthalmology and Otolaryngology,* March, 1954.

Alfred H. Whittaker, M.D., F.A.C.S., F.I.C.S., Detroit, and **William D. Butt, M.D.,** Toronto, Canada, are the authors of an article entitled "Some Observations on the Treatment of Burns" published in *The Journal of the International College of Surgeons,* March, 1953.

Alfred H. Whittaker, M.D., Detroit, is the author of an article entitled "Treatment of Burns by Excision and Immediate Skin Grafting" published in *The American Journal of Surgery,* March, 1953.

Robert J. Bolt, M.D., and **H. Marvin Pollard, M.D.,** Ann Arbor, are the authors of an article entitled "Combined Use of Antibiotics and Chemotherapy in Ulcerative Alimentary Disease" published in the *University of Michigan Medical Bulletin,* February, 1954.

Carey P. McCord, M.D., Ann Arbor, is the author of the sixth of a series of articles entitled "Lead and Lead Poisoning in Early America" published in *Industrial Medicine and Surgery,* March, 1954.

Plinn F. Morse, M.D., Detroit, is the author of an article entitled "Pathology and its Role in Ophthalmology and Otolaryngology" reprinted from the *Transactions, American Academy Ophthalmology and Otolaryngology,* January-February, 1953, in *Harper Hospital Bulletin,* November-December, 1953.

Kenneth R. Magee, M.D., and **Russell N. DeJong, M.D.,** Ann Arbor, are the authors of an article entitled "Antispasmodic Compound 08958 in Treatment of Paralysis Agitans," condensed from *The Journal of the American Medical Association,* October, 1953, in *American Practitioner and Digest of Treatment,* February, 1954.

Cyrus C. Sturgis, M.D., Ann Arbor, was the moderator for "Panel Discussion: Blood Dyscrasias" presented before the Baltimore City Medical Society, January 16, 1953, and published in the *Maryland State Medical Journal,* February, 1954.

Lynn A. Ferguson, M.D., James A. Ferguson, M.D., Benjamin R. Van Zwalenburg, M.D., and **Edward F. Ducey, M.D.,** Grand Rapids, are authors of an article entitled "Clinical X-Ray Staff Conferences on the Colon," presented before the Eighteenth Annual Convention of the National Gastroenterological Association, Los Angeles, California, October 12, 13, 14, 1953, and published in *The American Journal of Gastroenterology,* March, 1954.

A. H. Whittaker, M.D., Detroit, is the author of a biography of the late James T. Whittaker, M.D., of Cincinnati, which was published in the *Ohio State Medical Journal,* February, 1954.

* * *

Richard S. Hahn, M.D., of the Department of Thoracic Surgery of the University Hospital, Ann Arbor, Michigan, was on March 29, 1954, named by the Rhode Island Medical Society as the 1953 winner of the Caleb Fiske Essay Award, the nation's oldest medical essay competition. His prize winning essay was on "Recent Advances in Cardiac Surgery," and he became the 72nd prize essayist in a competition instituted in 1834.

He will present his latest medical paper at the 143rd Annual Meeting of the Rhode Island Medical Society in Providence on May 5, 1954.

A Benjamin Swig Fellow in Experimental Surgery in 1952, and holder of a Heart Traineeship at the National Heart Institute last year, Dr. Hahn has trained in

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general and thoracic surgery at the Western Reserve University in Cleveland, Ohio, under Dr. Claude S. Beck, at Stanford University in Palo Alto, California, under Dr. Emile Holman, and presently at the University of Michigan under Drs. John Alexander, Cameron Haight, and Frederick Coller.

* * *

Action taken by the Medical Staff of the Battle Creek Sanitarium Hospital, February 26, 1954: "Medication and treatment orders shall carry with them a termination date, otherwise they will be discontinued at the end of forty-eight (48) hours and shall continue being discontinued until rewritten or otherwise specificially ordered."

* * *

Grants to support research projects being conducted in eleven universities were announced recently by Eli Lilly and Company. The University of Michigan was one of the institutions benefiting from the Lilly grants, when a renewal of support for work was made to Robert C. Elderfield, M.D., department of chemistry for Mr. Orville McCurdy on the synthesis of compounds related to the alstonia alkaloids.

* * *

Notice sent to parents of children taking athletics at the W. K. Kellogg School at Hickory Corners, Mich.:— "We insist that you be covered by some kind of insurance or bring a letter from home informing us that your parents are aware of the risk you are taking. If you have Blue Cross insurance you are probably well covered, few other insurance policies cover high school athletics."

* * *

The Annual 1954 Conference of the seventy-eight Blue Shield plans has studied and endorses the basic objectives of the President's message to Congress on Health insurance matters. It believes in the encouragement of experimentation and expansion in the field of voluntary health insurance.

The Plans recognize and appreciate the sincere intent of President Eisenhower's administration to make adequate health coverage available to more people by "encouraging and stimulating the expansion of voluntary health programs."

With these premises in mind, the Blue Shield Plans have given careful consideration to the Administration's reinsurance proposal and has come to the conclusion that it may well be unnecessary with respect to Blue Shield Plans for the following reasons:

1. An outstanding characteristic of Blue Shield Plans is that they have experimented and pioneered in a totally new concept of medical protection and have demonstrated their ability to stand on their own feet financially.

2. Since their inception, Blue Shield Plans have been underwritten and hence, in fact, reinsured by the physicians who sponsor them. Customarily there is either a written or implied agreement that sponsoring physicians will accept a pro rata reduction in fees paid by the Plan should it become necessary for them to do so. Several

of the most successful Blue Shield Plans in operation today were subsidized in this manner by their sponsoring physicians during their early days of experimentation in an unexplored field.

3. In but a few short years, Blue Shield Plans have made remarkable progress in both the extension of enrollment and the extension of benefits. At present Blue Shield Plans have an enrollment of over 29 million people. Having come through the early critical period there is no reason to expect that they will now need to rely upon anything other than their own proven resources as they continue to expand their operations in accordance with the reasonable expectations of the public.

Unanimously adopted by the National Conference of Blue Shield Commission, April 8, 1954, New York.

* * *

Committee to Study Intern Problem.—Acting on a resolution adopted by the AMA House of Delegates at its June meeting in New York, Speaker James R. Reuling recently appointed a committee of five to study the intern problem.

Members of the committee are: Drs. George S. Klump, Williamsport, Pa., chairman; Abraham H. Aaron, Buffalo, N. Y.; H. Russell Brown, Watertown, S. D.; George A. Earl, St. Paul, Minn., and William A. Hyland, Grand Rapids, Mich.

The committee already has held a preliminary telephone conference and tentatively set April 24 as the date for its first official meeting. The session will be held at AMA headquarters.

Many of the present problems involving internship stem from the discrepancy between the number of internships offered in approved hospitals and the number of available applicants. As a result, hospitals, particularly those of smaller size and without medical school affiliation, have had difficulty in filling their house staff requirements. It is anticipated that the committee will give consideration to this and related problems.—*AMA Secretary's Letter.*

NEW ADDRESS

Michigan State Board of Registration in Medicine, 118 Stevens T. Mason Building (New State Building), West Michigan Avenue, Lansing 26, Michigan.

J. Earl McIntyre, M.D., Executive Secretary. Telephones: Capitol Exchange 5-8144, Ext. 2862-63—Saturday afternoon and night line 2-6084.

Norman F. Miller, M.D., Ann Arbor, was guest speaker at the Allegan County Medical Society meeting of May 11 on "Terminal Care for the Gynecological Cancer Patient." This meeting was the "prize" gained by the Allegan County Medical Society for sending the greatest percentage of members to the September, 1953 MSMS Annual Session. The Michigan State Medical Society agreed to furnish any speaker in the United States or Canada, selected by the county medical society which sent the greatest percentage of membership

to the 1953 Annual Session. Allegan County Medical Society sent 82.6 per cent of its members to the Grand Rapids meeting last autumn.

* * *

Russell R. deAlvarez, M.D., University of Washington Medical School, Seattle, and J. Robert Wilson, M.D., Temple University School of Medicine, Philadelphia, have accepted invitation to be on the program of the Clara Elizabeth Fund Lectures, Genesee County Medical Society, Wednesday, November 3, 1954, in Flint. The name of the pediatrician-member of the team will be announced in a subsequent number of JMSMS.

All members of the Michigan State Medical Society are invited by the Genesee County Medical Society to attend the November 3 Lectures, to be held in Flint.

* * *

The Straith Memorial Hospital, including the Straith Clinic, was opened at 2605 W. Grand Blvd., Detroit, on April 1. The Straith Hospital is a memorial to the late Dr. Samuel Straith who 50 years ago pioneered in the specialty of exodontia and oral surgery in Detroit.

* * *

Bon Secour Hospital, Grosse Pointe, Michigan, has for its Committee on Arrangements for the Annual Clinic Day, June 8, 1954, E. G. Aldrich, M.D., D. N. Sweeny, Jr., M.D., N. M. Taylor M.D., J. F. Wenzel, M.D., and J. B. Woolfenden, M.D., all of Detroit.

* * *

The American Congress of Physical Medicine and Rehabilitation announces its 32nd annual scientific and clinical session, Statler Hotel, Washington, D. C., September 7-11, 1954. For information and program write the Congress at 30 N. Michigan Avenue, Chicago 2, Illinois.

* * *

The Pan-Pacific Surgical Association announces its Sixth Congress in Honolulu, Hawaii, October 7-18, 1954. For information and program, write F. J. Pinkerton, M.D., Suite 7, Young Bldg., Honolulu.

* * *

"How to Select a Family Doctor" is the title of a public service advertisement being sponsored by Parke, Davis & Company, Detroit. For copies of this very worthwhile advertisement containing three important suggestions on how to select a doctor of medicine, write

Harry J. Loynd, President, Parke, Davis & Company, Detroit. These advertisements have appeared in *Life Magazine, Woman's Home Companion, Today's Health, Parent Magazine,* and *Saturday Evening Post.*

* * *

The Genesee County Medical Society's ninth Annual Cancer Day attracted over 300 M.D. registrations. Speakers were Emerson M. Day, M.D., of New York, Eugene P. Pendergrass, M.D., of Philadelphia, Frederick A. Coller, M.D., of Ann Arbor, Osborne A. Brines, M.D., of Detroit, and Howard C. Taylor, M.D., of New York.

William Bromme, M.D., Detroit, Chairman of the MSMS Council, chairmanned the morning session; the afternoon chairman was Harry M. Nelson, M.D., Detroit, Director and Past President, American Cancer Society.

The dinner speaker was Leonard A. Scheele, M.D., Surgeon General, United States Public Health Service, Washington, D. C.

* * *

The Sixth International Cancer Congress will be held in São Paulo, Brazil, July 23-29, 1954. For program and information on transportation and hotel arrangements, write Brewster S. Miller, M.D., Director, Professional Education Section, American Cancer Society, 47 Beaver Street, New York 4, N. Y.

* * *

Looking Back: In 1924, soldiers' bonus certificates were voted, even over a Coolidge veto. A man in Russia named Lenin dies and an unknown by the name of Stalin takes over. Japanese immigrants barred from the United States. Al Smith and McAdoo fight a deadlock for the Democratic nomination with the result that Davis is nominated who is easily defeated by Coolidge.

1934: Dollar devalued to raise prices, without result. "Okies" move from the dust bowl. Huey Long brings his "share the wealth" to the nation. Much talk of "underprivileged" and the rise of the social workers. A national deficit for five years worries some people!

1944: The War is still long and painful but war production is zooming. Draft and rules and regulations and rationing. Strikes. Casablanca, Yalta, and Potsdam meetings are held—their imprint will affect the world for centuries; Congress objects to secrecy, suspects deals especially at Yalta. U.N. born in San Francisco, April, 1945—with high hopes. Roosevelt elected to his fourth term (defeating Dewey). Senator Truman of Missouri becomes Vice President.

* * *

The Chicago Medical Society announces a special all air transportation plan to the AMA convention in San Francisco, with a tour of the Hawaiian Islands following. The takeoff from Chicago is scheduled for June 20 with arrival in San Francisco on the same day. The party will leave for Hawaii midnight June 25 from San Francisco. Return from Honolulu, midnight July 4 with arrival in Chicago on July 5. If interested in more information or reservations, write Elmer V. McCarthy, M.D., Chairman, 86 E. Randolph St., Chicago 1, Ill.

New Hope for Hearts: Through research lives which have been lost are now being saved and rebuilt. In research lies hope for treatment, prevention and cure.

* * *

The Third International Poliomyelitis Conference will be held at the University of Rome, Rome, Italy, September 6-10, 1954. Among the participants are James L. Wilson, M.D., Ann Arbor.

WHAT THEY THOUGHT OF THE 1954 MICHIGAN CLINICAL INSTITUTE

Guest Speaker Friedrich W. Niehaus, M.D., Omaha, Nebr.: "I thoroughly enjoyed my stay and am very grateful to you for inviting me to this meeting. My ubiquitous host, Dr. Nelson Taylor, and his wife were excellent hosts and left nothing undone."

Guest Speaker J. H. Warvel, M.D., Indianapolis: "I was never so royally treated in all my life. Certainly every wish that your guest speakers could make were taken care of by your most excellent hosts. I enjoyed myself very much and want to say it was a real treat to spend the day in your city at the Michigan Clinical Institute."

Guest Speaker Bentley P. Colcock, M.D., Boston: "I would like to say that I have seldom seen a better organized meeting and my host, E. R. Sherrin, M.D., was perfectly wonderful. All of you could not have done more for your guests and I do hope the Michigan Clinical Institute proved to be a successful meeting."

Guest Speaker Reginald G. Bickford, M.D., Rochester, Minn.: "I would like to take this opportunity of expressing my thanks for the unique hospitality that I enjoyed from members of your organization during my stay at the Michigan Clinical Institute in Detroit."

Guest Speaker Albert B. Sabin, M.D., Cincinnati: "I want to take this opportunity to thank you for your fine hospitality and especially for that fine basket of fruit which I found in my room at the Sheraton-Cadillac Hotel, Detroit, during the Michigan Clinical Institute."

Guest Speaker Eugene P. Pendergrass, M.D., Philadelphia: "I want to thank you for the part that you played in making my trip to Detroit such a pleasant one. I notice that the scroll that I received from the Michigan State Medical Society has your name inscribed thereon as President of the Society. I treasure this very, very much."

BEAUMONT MEMORIAL CONTRIBUTORS

(Continued from Page 561)

Kenneth VandenBerg, M.D., Pontiac.
Henry J. VanderBerg, Jr. M.D., Detroit,
Mrs. Spencer H. Wager, M.D., Monroe; Lyle G. Waggoner, M.D., Detroit; James J. Waring, M.D., Denver, Colorado; Casimir P. Weiss, M.D., Detroit; Robert R. Wessels, M.D., Birmingham; Thomas W. Wharton, M.D., Wyandotte; Don White, M.D., Lincoln Park; R. Hamilton White, M.D., Birmingham; Jack E. Wieh, M.D., Traverse City; Morton J. Wiener, M.D., Detroit; A. L. Wood, M.D., Dearborn.
Joseph J. Worzniak, M.D., Wyandotte.
Myron R. Zbudowski, M.D., Detroit.

THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

GRIST OF A DECADE. From the pen of A. C. Pfeifer, M.D., in the Bulletin of Genesee County Medical Society, 1942-1952. Flint, Michigan: Genesee County Medical Society, 1953.

As a tribute to its retiring president, the Genesee County Medical Society published this little book, a collection of the writings of A. C. Pfeifer, M.D., who preceding his term as president had served eleven years as editor of the *Bulletin of the Genesee County Medical Society*. Many times during those years we had read his caustic and timely editorials. Sometimes we quoted from them. This little collection in one bound volume is indeed a tribute, and we have been privileged to scan again the offerings of many years, profound thought, rare humor, and withal pleasant reading.

W.H.

THE ALLERGIC CHILD. Harry Swartz, M.D. New York: Coward-McCann, Inc., 1953. Price $3.95.

This book is aimed at the parents of 20 million allergic children in the United States. The alleged purpose is to help educate parents to get children suffering from allergy treated for allergy and not epilepsy, acne, behavior problems, otitis media, et cetera.

The total effect of this type of literature is hard to evaluate. The book would be extremely helpful if prescribed by the doctor to selected patients, but probably dangerous for a nervous mother.

R.S.S.

MUSIC THERAPY. Edited by Edward Podolsky, M.D., Department of Psychiatry, Kings County Hospital, Brooklyn, N. Y. New York: Philosophical Library, 1953. Price $6.00

The title of this book brings up the question of whether music actually is therapy. It has been known since ancient times that, depending on the type, music has either a stimulating or a soothing effect. The author with a large group of contributors has compiled a rather complete discussion of the effects, methods and utilization of this medium for the benefit of the ill. The introduction reports historical incidences and observations on the use of music. There are thirty-three short chapters by different contributors on such subjects, viz: The organization of a musical program, music therapy in anxiety states, in mania, in depressions, for schizophrenia, for emotional fatigue, tension headaches, in emotional high blood pressure, for gastric and heart disturbances, in operating rooms, in military medicine, et cetera. For each of these conditions types of music and selections are prescribed.

This is a small volume and yet it is complete in providing suggestions for the setting up and conduction of a musical program in institutions or hospitals.

G.K.S.

THE JEALOUS CHILD. By Edward Podolsky, M.D., Department of Psychiatry, Kings County Hospital, Brooklyn, New York. New York: Philosophical Library, 1953. Price $3.75.

It appears to be the aim of this book to be a "best" or good seller. It is written in language that can be easily understood by laymen. The author has not limited himself to the subject matter; instead, he presents psychological factors that may occur in different diseases or illnesses. In it, there is really nothing new nor does it contain material that has not been presented innumerable times in the literature. Because of thsee findings, this small volume hardly warrants enthusiastic endorsement.

G.K.S.

SCHOOL HEALTH SERVICES. A Report of the Joint Committee on Health Problems in Education of the National Education Association and the American Medical Association with the co-operation of contributors and consultants. Charles C. Wilson, M.D., Professor of Education and Public Health, Yale University, Editor. Chicago: National Education Association and American Medical Association, 1954. Price $5.00.

This is an eighteen-chapter textbook discussing modern health services to school-age children. It is designed primarily for teachers, nurses and public health workers.

Methods of screening and assessing general health, vision, hearing, dental health, and mental health are discussed, as well as the administrative aspects of the screening techniques.

Considerable space is given to procedures for improving follow-up. The need for community interest and support for solving the broad problems of school-age health is emphasized.

There are chapters discussing special problems, such as epilepsy and heart disease, emergency care and first aid, communicable disease control and school sanitation.

This is an authoritative volume useful to physicians who work as school doctors or advisors or who are involved in developing or changing school health services. It should be of particular use to the school health and public health committees of the local medical society.

W.J.M.

CLINICAL ENDOCRINOLOGY. By Karl E. Paschkis, M.D., Associate Professor of Medicine, Assistant Professor of Physiology, Director of the Division of Endocrine and Cancer Research, Jefferson Medical College; Chief of Endocrine Clinic, Jefferson Medical College Hospital; Attending Endocrinologist, St. Christopher's Hospital for Children, Philadelphia, Pa. Abraham E. Rakoff, M.D., Clinical Professor of Obstetric and Gynecologic Endocrinology, Jefferson Medical College; Endocrinologist to the Hospital Laboratories, Jefferson Medical College Hospital; Guest Lecturer in Gynecic Endocrinology, Department of Internal Medicine, Graduate School of Medicine, University of Pennsylvania, Philadelphia, Pa. Abraham Cantarow, M.D., Professor of Biochemistry, Jefferson Medical College; formerly Associate Professor of Medicine, Jefferson Medical College and Assistant Physician, Jefferson Medical College Hospital, Philadelphia, Pa. With 253 Illustrations, 5 in Full Color. New York: Hoeber-Harper, 1953. Price $16.00.

This publication is the work of three authors, all of Jefferson Medical College in Philadelphia. All have substantial clinical as well as academic backgrounds, in

physiology, clinical medicine and biochemistry respectively, and have worked and taught together for a number of years.

The endocrine glands are presented separately under ten different sections. One section is devoted to the subject of obesity and the final section is devoted to methods of study and to a listing of commercial endocrine preparations. In each section embryology, anatomy, histology, physiology, pathology, pathological physiology, diagnosis and treatment are taken up in logical sequence. The rationale behind diagnostic and therapeutic methods is likewise discussed. Differential diagnosis and the inter-relationships between the various endocrines are discussed in each instance. A list of references follows each section. A complete and useful index is included at the end of the text.

Adequate illustrations accompany the text, portraying typical diseases and conditions found in clinical practice, with an easily readable print, written in an interesting style with logical development.

This is an excellent work, both for the student and for the practicing clinician as well. Methods of diagnosis and treatment, bolstered with the underlying rationales from the viewpoint of pathologic physiology, are presented in a concise manner, making the text useful as a source of ready reference.

It seems to be a work well done, carefully thought out by teachers of experience, and can be recommended for the reference shelf of any physician, by virtue of its eminent readability.

R.W.B.

RISING COSTS OF THE HEALTH SERVICE PLAN

(Continued from Page 556)

order everything in the book in the way of laboratory and pharmacy service; and you will pay scant attention to the length of the patient's hospital stay. Thereby you will speed the entire plan toward insolvency.

But if you are mindful of the purposes of voluntary health insurance, protection of the patient against overwhelming costs, and the privilege of hospitalizing him when necessary, you will measure the individual need carefully, remembering that the cost still comes out of the patient's pocket. Thereby you will enlarge the entire service for more people at lower costs; and you will postpone the day, perhaps indefinitely, when paternalistic forces may move into the field.

We doctors have in voluntary health insurance both a plough-share and a sword. We serve the people and at the same time fend off poachers in the field of health service. If we fail to recognize the dual virtues of our health service plans and do everything we can to promote their growth both the public and the profession will be the losers.

WILLIAM S. REVENO, M.D.

Communication

L. W. Hull, M.D.
President, Michigan State Medical Society
Detroit, Michigan
Dear Doctor Hull:

At the October 23 meeting of the Board of Commissioners of the State Bar of Michigan, unanimous approval and commendation were given to the April, 1953, issue of THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY.

Your magazine carried a beautiful cover, most appropriate for the occasion in which your great association and the State Bar collaborated on printing the same material in their respective publications.

The State Bar's governing body salutes the Michigan State Medical Society and its progressive editorial policy.

Yours very sincerely,
RICHARD H. PAULSON
President, State Bar of Michigan

Nov. 27, 1953

* * *

Michigan State Medical Society
4421 Woodward Avenue
Detroit 1, Michigan
Gentlemen:

Your letter of January 21, including a copy of the March JOURNAL of the Michigan State Medical Society, is at hand. You may wish to know that the request for a copy of this JOURNAL came to Parke, Davis & Company among other requests from a doctor in Italy. Evidently, information regarding your articles in the JOURNAL reaches Italy and, consequently, this request. We will forward this JOURNAL with the other material which has been requested from Parke, Davis & Company.

I want to express my appreciation for your kindness in sending this copy.

Sincerely,
HARVEY M. MERKER, Sc.D., Eng.D.
Director of Scientific Relations
Parke, Davis and Company

Detroit, Michigan
January 22, 1954

* * *

William Bromme, M.D.
Detroit, Michigan
Dear Dr. Bromme:

Both personally, and on behalf of the Woman's Auxiliary to the Wayne County Medical Society, I wish to thank you for coming to us yesterday. We know that it entailed adding one more task to an already overflowing schedule, and we are indeed grateful.

I feel that your presentation of this highly controversial subject was excellent public relations for the Medical profession for several reasons. Firstly, our Auxiliary members should be alerted to the issues involved and informed of the viewpoints of the Medical Society; secondly, our guests came from a widely diversified group of women's organizations in Wayne County, and so you were able to present the viewpoints of Medicine to areas of our population difficult to reach in any other way.

During the tea hour it was most heartening to receive many favorable comments about your talk, and I know that you were instrumental in creating a climate which is favorable to good public relations for the Medical Society.

With kindest personal regards, I am,

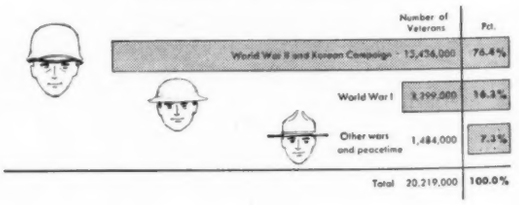
Sincerely yours,
MRS. WILLIAM MACKERSIE
Public Relations Chairman
Woman's Auxiliary to MSMS

Detroit, Michigan
March 13, 1954

In Viewing the VA Medical Program . . .

analysis of veteran population

PERIOD OF SERVICE



Taxpayers should note that as veterans grow older they require more frequent and increasingly longer periods of hospitalization. World War I patients are now hospitalized twice as long, on the average, as World War II patients with similar disabilities. World War II veterans, relatively young and comprising 76% of the total veteran population, present a costly long term responsibility to U. S. taxpayers. The medical profession recommends medical care through the VA for only those veterans with service-incurred disabilities and temporarily for those with tuberculosis or neuropsychiatric conditions of non-service-connected origin.